Sunnybrook and Women's College Health Sciences Centre
Perinatology and Gynaecology Program Review

Final Report

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1. Executive Summary

The Minister of Health and Long-Term Care commissioned this review of Sunnybrook and Women's College Health Science Centre (SWCHSC) Perinatalogy and Gynaecology (P&G) Program to determine the most appropriate site and management model for the Program. SWCHSC is proposing to move the P&G Program from the Women's College Campus to the Bayview Campus at a capital cost of $135M[1]. Current plans indicate that total capital redevelopment projects at the Bayview Campus will exceed $300M and require up to $100M to support the local share. The Ministry of Health and Long-Term Care (MoHLTC) is concerned about the quality of services and the affordability of this project.

The Review Team, led by Dr. Jack Kitts, completed a clinical review and a capital review. The clinical review included examination of patient care, education and research. The capital review included examination of capital plans and financing. The methodology included a comprehensive review of relevant documentation, extensive stakeholder consultation and detailed analysis of capital and financial information. The findings from the clinical review directed the capital review.

a. Clinical Review

The SWCHSC P&G Program has a well-deserved reputation for excellence in patient care, education and research. The Program is a designated regional tertiary perinatal centre and is a vital service provider in the greater Toronto area (GTA).

The SWCHSC P&G Program is currently located at the Women's College Campus at 76 Grenville St. Current infrastructure is dated and is no longer for patient care. The Women's College Campus falls short of meeting provincial and national standards for perinatal infrastructure. In addition, there is no inpatient medical or surgical support at the Women's College Campus, raising serious safety concerns for P&G patients.

The P&G Program has notable strengths despite its isolation and physical conditions. The academic program is strong and the relationship with the University of Toronto is healthy. The staff and physician team is exceptional. Through the diligent efforts of the team, the P&G Program continues to offer quality patient care.

The Review found no evidence of unsafe care to date, but prolonged service delivery in the current environment at Women's College Campus may compromise safety. The P&G Program is not sustainable in its current environment.

The Review Team explored four options for the site and management of the SWCHSC Program:

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[1] Includes total project costs of $127.4M, Head Start project costs of $3.3M and CUP allocation costs of $4.5M. Shell costs are escalated to March 2005 and P&G fitout costs are escalated to March 2007.

1. Maintain the complete P&G Program at the Women's College Campus of SWCHSC;

2. Maintain only low risk obstetrics at the Women's College Campus of SWCHSC; transfer the remainder of the Program to another academic health science centre;

3. Transfer high-risk obstetrics, neonatology and associated clinical services to Mount Sinai Hospital; transfer the remainder of the P&G Program to 3 partner hospitals.

4. Transfer the complete P&G Program to the Bayview Campus of SWCHSC;

The clinical and capital reviews do not support Options 1 and 2. Maintenance of any P&G inpatient activity at the Women's College Campus would require repatriation of inpatient medical and surgical services to that campus for patient safety and Program sustainability. This would require extensive capital development on the Women's College Campus and result in operational inefficiencies.

The Mount Sinai Hospital option presented certain advantages, but concerns regarding single site consolidation of tertiary perinatal services were greater. Specific concerns included: risk management, patient access, development of diverse clinical expertise and community support. In addition, it was unclear that the Mount Sinai Hospital option would result in significant savings compared to the Bayview Campus option.

Patient care, education and research interests must drive the site and management models for the P&G Program and the Review demonstrated a clear advantage to move the Program in its entirety to the Bayview Campus of SWCHSC. Significant benefits of relocation to the Bayview Campus include:

- All the benefits of relocation to a full service inpatient facility;
- Co-location of high risk maternity services with well developed cancer, cardiac and critical care programs, creating the potential for further excellence in subspecialty obstetrics;
- Reduced risk associated with infection or facility disaster by dividing capacity across institutions;
- Increased accessibility for GTA 905 patients by providing care closer to home;
- Alignment with the community, including academic institutions, research bodies, health care organizations and community advocacy groups;
- Two Foundations fundraising for tertiary Toronto P&G services.

b. Capital Review

SWCHSC is proposing a 4-floor addition to the existing M-wing at the Bayview Campus. The P&G Program would occupy the first 2.5 floors. The current P&G development cost estimate is $127M, including ancillaries, fixtures, furnishings and equipment (FF&E). The total project cost includes an additional $4.5M allocation for the Central Utilities Plant (CUP) and $3.3M for a *Head Start* Project at the Women's College Campus. The

current P&G Program occupancy date is March 2009, but this assumes M-wing shell tender in Spring 2005.

The Capital Review Team's objectives were threefold:

- Follow the direction indicated by the Clinical Review;
- Maintain the scope and quality of services approved in the P&G Program Functional Plan;
- Recommend a cost-effective capital and operating solution.

The following criteria guided the capital review:

1. For patient safety reasons, the timeline for relocation of the P&G Program to the Bayview Campus must be as expeditious as possible. Speed is of the essence.

2. The most cost-effective development solution must be utilized.

3. The project must be affordable.

4. The solution must enhance the efforts of the Sunnybrook and Women's Foundation in raising the local share by early and visible construction progress.

5. The facility design must be flexible to meet future capital needs and growth.

6. The P&G capital solution must be aligned with other pending capital development projects namely the Emergency Department renovation/expansion and the Central Utilities Plant development.

7. The approach must abide by the intent of current MoHLTC capital planning policy.

Analysis demonstrates that the P&G Program can be accommodated with a two floor M-wing expansion without reducing the scope or quality of services. Furthermore, there is an opportunity to shorten the construction period and accelerate the P&G Program's relocation to the Bayview Campus. There are opportunities to reduce costs by re-examining technical aspects of the design, shortening the construction time period and redeveloping financing and cash flow plans to reflect current realities.

c. Recommendation

The Review Team recommends the P&G Program be relocated to the Bayview Campus of SWCHSC as expeditiously as possible. The P&G Program should be accommodated with a 2-floor M-wing expansion. The recommended P&G Program development will cost approximately $108M, including a CUP allocation of $3.6M, ancillary costs, FF&E and escalation. The expected P&G occupancy date is Spring 2009.

The Review Team recommends constructing a 2-floor M-wing shell above the P&G Program. The cost for the 2-floor M-wing shell, including CUP allocation is $28.1M.

The 2-floor M-wing shell would cost an additional $30M to construct if tendered one year following P&G Program occupancy and construction would disrupt the P&G Program. It is likely SWCHSC will require capacity for future growth. As the 2-floor shell would be funded at owner's expense, until occupied by MoHLTC directed services, it makes little sense to incur the $30M deferment premium.

The capital project should be issued as a single tender to minimize cost and accelerate the P&G occupancy date. The redeveloped cash flow and financing plan demonstrates SWCHSC will be able to repay its share of the capital redevelopment by fiscal 2010/11.

2. Context

a. Rationale for the Review

In February 2005 the Ministry of Health and Long-Term Care commissioned this review of Sunnybrook and Women's College Health Science Centre (SWCHSC) Perinatology and Gynaecology (P&G) Program. The purpose of the review was to determine the most appropriate site and management model for the Program.

In 1997 the Health Services Restructuring Commission (HSRC) directed the amalgamation of the Orthopaedic and Arthritic Hospital, Women's College Hospital and Sunnybrook Health Sciences Centre. All inpatient activity was to transfer to the Bayview Campus; the Orthopaedic and Arthritic Institute (OAI) Campus would close and the Women's College Campus (WCC) would become an ambulatory care centre.

All medical and surgical inpatient activity has transferred from the Women's College Campus to the Bayview Campus as per HSRC directions. However, the transfer of the P&G Program from the WCC and the Orthopaedic and Arthritic Program from the OAI has not yet occurred. The isolation of the P&G program at the WCC has raised safety and sustainability concerns.

SWCHSC is proposing a significant capital redevelopment project at its Bayview Campus to fulfill HSRC directions. This project also includes expansion and redevelopment of the Bayview Campus Emergency Department. The proposed redevelopment exceeds $300M in total project costs and requires up to $100M in bridge financing to support the local share.

The Ministry of Health and Long-Term Care (MOHLTC) is concerned regarding the affordability of this project and has advised that the OAI site should remain in operation for the foreseeable future. Therefore, the MOHLTC sought a focused review of the HSRC directions as they pertain to the site and management of the P&G component of the project to determine if the proposed redevelopment solution is the most efficient and effective long-term capital and operating solution for delivery of this program.

b. Review Leadership

The Minister of Health and Long-Term Care appointed Dr. Jack Kitts, President and Chief Executive Officer of The Ottawa Hospital, to conduct the Review.

c. Review Accountability

Dr. Kitts submits this report directly to the Honorable George Smitherman, Minister of Health and Long-Term Care for his consideration and implementation.

d. Review Principles and Scope

The SWCHSC P&G Program Focused Review followed the principles outlined in its Terms of Reference (see Appendix B), namely:

- Consistency with the MoHLTC's transformation agenda;
- Local affordability and financial viability of the corporation and the government;
- Optimal service delivery;
- Consistency with National, Provincial and Greater Toronto Area (GTA) guidelines and standards;
- Clinical coherence;
- Resolution of current safety and quality issues;
- A physical solution that accommodates program needs;
- Optimal clinical, operational and quality outcomes;
- Assumption that the Wellesley Street site, the current location of the Orthopaedic and Arthritic Institute, will remain in operation for the foreseeable future;
- Assumption that the scope and volumes of the P&G program are as per the MoHLTC approved Functional Program.
- Consideration of:
  - Bill 51 "the Sunnybrook and Women's College Health Sciences Centre Act";
  - S&WCHSC clinical priorities, mission and vision;
  - Educational and research mandates;
  - Recruitment and retention of medical, technical and professional staff;
  - Future demand for P&G services in the Toronto region;
  - Feasibility of proposed options and acceptance by the system partners.

The Review used four dimensions to evaluate quality: access to care, appropriateness of care, safety of care and satisfaction with care.

This Review was limited to the SWCHSC P&G program and the most appropriate capital and operational model, within an academic health sciences centre environment.

e. Review Process

Methodology for the Review included a comprehensive review of relevant reports, documentation and statistics (see Appendix C), and extensive stakeholder consultation (see Appendix D). In addition, Review Team members and SWCHSC performed detailed analysis to guide the Review's recommendations.

3. Current State

a. Clinical Service

The Perinatology and Gynaecology Program at the Women's College Campus is comprised of obstetrical, neonatal and women's health services. A dedicated team of health professionals provides high quality, patient and family centred care. The Pr[illegible]am is a designated regional tertiary perinatal centre.

The perinatal component of the Program provides ambulatory and inpatient care to local low and moderate risk women and newborns (Level I and II) and tertiary (Level III) care to regional high-risk women and neonates. The gynaecology component of the Program at WCC provides inpatient and ambulatory care, including day surgery, to low and moderate risk women. Gynaecologic oncology is located at the Bayview Campus.

Level of care

The SWCHSC perinatal program has a well-deserved reputation for excellence in the management of multiple births and extreme prematurity. Approximately 45 percent of neonates in the NICU weigh less than 1500 grams[2]. Care for pregnant women and mothers is also excellent; demand for service exceeds capacity and approximately 100 women who select the WCC for delivery must be referred elsewhere annually.

While the SWCHSC P&G program provides exemplary care, the lack of inpatient support at the WCC raises safety concerns for adult patients. To manage risk, the obstetrical team carefully screens maternal patients and refers some high-risk women with co-morbid conditions to Mt. Sinai Hospital or another appropriate facility. Although the acuity of WCC obstetrical patients has increased[3], there is a perception that peer organizations are caring for women with more complex needs. This raises concerns for skill development and maintenance and creates recruitment and retention challenges.

Activity Trends

In June 2004, SWCHSC commissioned the Andrews Group to review internal and external P&G needs and trends. The Andrews Group Report clearly describes the regional maternal and newborn care environment and positions the SWCHSC P&G program as an important tertiary service provider within the GTA.[4]

The following statistics illustrate the size and characteristics of SWCHSC's P&G Program. This information is important when considering the most appropriate site and management model for the Program.

Table 1: SWCHSC Perinatology and Gynaecology Program Trends[5]

Indicator	2001-2002	2002-2003	2003-2004
			Analysis
			• The increasing c-section rate has implications for the O.R. and bed utilization. • The falling high-risk occupancy rate decreases the number of beds

[2] Source: SWCHSC [illegible]

[3] The number of case[illegible] s increased 30% between Sept – Nov 98 and Sept – Nov 03. Source: Ne[illegible] he Andrews Group.

[4] Source: Needs and [illegible] rews Group.

[5] Source: Needs and [illegible] rews Group.

Deliveries	3733	3462	3567
Babies	3928	3656	3733
C-section rate	27.8%	29.5%	34.3%
NICU % < 1500 g	38.3%	41.5%	44.8%
Surgical Gyn Discharges	1084	1011	1020
Beds			
High Risk	21	21	21
Combined Care	33	33	33
NICU	41	41	41
Surgical Gyn	17	19	15
Occupancy Rate			
High Risk	77.6%	79.6%	66.7%
Combined Care	80.9%	79.1%	77.3%
NICU	83.5%	75.8%	81.7%
Surgical Gyn	59.8%	48.6%	62.3%
ALOS (Days)			
High Risk	9.85	10.2	10.07
Total OBS	3.65	3.83	3.59
NICU	21.06	18.41	19.32
Surgical Gyn	2.74	2.54	2.55
Average RIW			
NICU	6.1799	5.2637	5.4886
Gyn	0.8798	0.8380	0.7428

Regional Role

SWCHSC plays an important role in the provision of P&G services for the GTA population.

The Greater Toronto Area

The GTA represents approximately 45 percent of Ontario's population[6]. Approximately one in five Canadian births occur in the GTA[7]. It is one of the fastest growing large urban areas in North America. Of the GTA's 5.1M people, 48.8 percent live in the City of Toronto (GTA 416) and 52.2 percent live in the outer regions (GTA 905)[4]. The GTA 905 is growing at a faster rate than the City of Toronto, particularly among those aged 35 and younger[8]. Based on the 2001 Census current and predicted demand for perinatology and gynaecology services will remain high.

Table 2: Women of Child Bearing Age and Deliveries[9]

[6] Source: Ministry of Finance, Demographic Trends (Based on 2001 Census of Canada). http://www.gov.on.ca/FIN/english/demographics/dtr0204e.htm.

[7] Source: Child Health Network, Niday Perinatal Database, First Annual Statistical Report, 2003-2004.

[8] Source: City of Toronto, http://www.city.toronto.on.ca/demographics/pdf/profile_tor_bulletin.pdf

[9] Source: The Hay Group CHN – IRC, Analysis of Population Need & Projection of Future Volumes. Based on the 2001 Census.

	GTA Total	GTA 416	GTA 905
Population (F 15-49)			
2002			690K
2011 (Projected)			788K
% Growth			14.2%
Deliveries			
2002			31,981
2011 (Projected)			37,925
% Growth			18.6%

Analysis

Increased growth in the GTA region does not support centralization of P&G services in the downtown core.

SWCHSC Perinatal Services for the GTA Population

In 2003-04 approximately 5.7 percent of GTA births occurred at SWCHSC[5]. Amongst GTA hospitals, SWCHSC has the second highest volume of deliveries at less than 32 weeks gestation (590 in 2002/03)[10]. Approximately 17 percent of SWCHSC neonates weigh 2500g or less (641 in 2002/03)[8].

SWCHSC is one of only two designated maternal and neonatal Level III centres. Mount Sinai Hospital (MSH) is the second maternal and neonatal Level III centre and The Hospital for Sick Children is designated as a neonatal Level III centre. Accordingly, SWCHSC is an important regional perinatal resource; SWCHSC receives more maternal transfers than any other GTA hospital[11]. In 2003/04 SWCHSC received 211 maternal transfers[9].

Table 3: Ontario Criticall Program: Referrals[9]

Year	Sent by Toronto to Toronto	Sent by Toronto out of Region	Sent by Toronto to MSH	Sent by Toronto to S&W	Sent by any to MSH	Sent by any to S&W
2001/02	250	71	96	84	151	179
2002/03	239	43	85	122	170	261
2003/04	181	47	64	85	171	211

Analysis

The transfer of any baby out of the region is a concern, but taken into perspective this occurs in approximately 47 out of 62,300 GTA births.

[10] Source: Child Health Network, Patient Volumes by Site and by Organization, The Hay Group
[11] Source: Ontario Criticall Program

The Level III centres are cognisant of their regional roles and make every effort to remain open to maternal and neonatal transfers. However, as demonstrated below, Level III NICUs in the GTA are frequently closed to admissions. Closures result from lack of beds, infectious disease outbreaks and staffing shortages.

Table 4: Level III NICU Closures in 2002-2003 and 2003-2004[12]

	SWCHSC	Mt. Sinai	Sick Kids
Closed			
2003/04			8%
2004/05			5%
Restricted			
2003/04			80%
2004/05			78%
Open			
2003/04	15%	14%	11%
2004/05	24%	21%	17%

Analysis

NICU capacity issues remain problematic at SWCHSC and Mount Sinai Hospital.

b. Infrastructure

The SWCHSC P&G Program is currently located at the Women's College Campus at 76 Grenville St. Current infrastructure is dated and is wholly inappropriate for patient care. Reviewers were dismayed with the cramped Level II and Level III nurseries and the obstetrical unit. Health Canada's *Family-Centred Maternity and Newborn Care: National Guidelines,* outlines Canadian standards for perinatal infrastructure. The WCC falls drastically short of meeting these standards.

Table 5: Comparing SWCHSC P&G Infrastructure with National Standards - Highlights

Standard	WCC Current Status
Labour, Birth, Recovery and Postpartum - LBR(P)	
• Private toilet, shower/tub	• One shared shower for all 8 labour rooms
• Room for basic equipment storage	• Insufficient room for equipment, health care providers, patients and partner
• Window with exterior view for LBRP	• No windows or natural light
• Size: 16 ft x 16 ft (256 sq ft), excluding toilet, tub/shower	• 5 of the 8 labour rooms are 152 sq ft or smaller. The smallest is 96 sq ft.
NICU	
• Noise levels less than 65 to 79	• Noise higher than standard

[12] Source: Ontario Criticall Program.

decibels	
• Incorporation of private family space	• No private family space within the NICU
• Level II size: 86 sq ft per bed	• Approximately 30 sq ft per bed
• Level III size: 130 sq ft per bed	• Approximately 30 sq ft per bed

Maintaining the P&G program in its current location would require significant upgrades to the physical environment. A comparative site analysis commissioned by SWCHSC in Fall 2004 estimated one-time capital costs to be approximately $200M - $220M.[13]

c. People

An exceptional team of highly skilled health professionals staffs the P&G program. Physicians, nurses, other health professionals and administrators work collaboratively in the best interests of their patients. Many health professionals expressed their appreciation for the collegial atmosphere of the SWCHSC P&G Program. Clinical leadership is excellent.

The team is anxiously awaiting resolution of the current situation. They have been actively planning to move to the Bayview Campus for over 7 years. Staff are keenly aware of the inadequate physical environment and clinical supports. As a result, team members have worked diligently to build safeguards. Some team members have contributed at great personal sacrifice. The uncertainty is wearing on all involved and the current situation is not sustainable.

Recruitment and retention is currently not an issue in nursing or the health professional disciplines. The Clinical Directors indicated that turnover in the NICU and Obstetrics is negligible. This is an enviable position for any organization and speaks to the quality of the team. There have been difficulties with anaesthesia coverage and challenges filling positions in maternal fetal medicine. If the current situation is not resolved it is almost certain physician recruitment and retention will become more difficult and challenges will emerge in nursing.

There are additional challenges with physician remuneration. Physicians in the P&G Program, including Obstetrical Anaesthesia, are on a fee for service payment model. This does not recognize the time and expertise involved in caring for high-risk women. An Alternate Funding Plan (AFP) would allow physicians to focus on higher acuity patients and protect time for teaching and research.

d. Academics

[13] Sunnybrook and Women's College Health Sciences Centre Perinatal and Gynaecology Comparative Site Analysis, Agnew Peckham, September 2004, Appendix B, Prepared by Hanscomb.

The SWCHSC P&G Program is academically strong. There are notable strengths in both research and education. SWCHSC actively supports its academic mission in the P&G Program through dedicated funding and organizational infrastructure. The relationship between the SWCHSC P&G Program and the University of Toronto is strong.

Research

SWCHSC has both a Research Institute and a Centre for Research in Women's Health (CRWH). Both research bodies promote the cell to society research model. Much of the P&G Program's research is coordinated under the Centre for Research in Women's Health. The CRWH is an Extra-Departmental unit of the Faculty of Medicine and is a partnership between SWCHSC and the University of Toronto. CRWH has approximately $12M in research funding, 4 Endowed Chairs and 3 Canada Research Chairs.

The Maternal Infant Reproductive Unit (MIRU) is the research jewel of the CRWH and the P&G Program. MIRU is an international leader in complex, randomized clinical OB/Gyn trials and has over $16M in external funding. SWCHSC provides infrastructure and financial support to MIRU.

Obstetrical Anaesthesia also has a strong research program, especially given the small size of the Division. Obstetrical Anaesthesia has one endowed professorship which they hope to convert to an endowed chair, and two fellows. There is strong collaboration with MIRU. The obstetrical anaesthetists are dedicated to both academics and patient care; they are an asset to the SWCHSC P&G Program.

Teaching

Teaching is a priority for the SWCHSC P&G Program, both at the undergraduate and graduate levels. The P&G Program is a critical teaching environment for the University of Toronto. There are several notable strengths.

Family Medicine plays an important role in the P&G Program. Family Medicine delivers 800 to 1000 babies annually at SWCHSC, and every birth is a teaching birth. The Department actively promotes family practice obstetrics and one third of its graduates provide interpartum care. This is an important contribution given the dwindling numbers of Ontario family physicians providing obstetrical care. The Department is also actively involved in research.

The University of Toronto recognizes numerous teaching strengths in the P&G Program. Surgical education is outstanding and the large Obstetrics program provides many educational opportunities for students. However, it is evident that co-location of the P&G Program with other clinical services would increase inter departmental educational opportunities.

e. The Organizational Environment

Bill 51

An Act of the Legislature created Sunnybrook and Women's College Health Sciences Centre in 1998. Bill 51, the Sunnybrook and Women's College Health Sciences Centre Act, dictated the following:

"...transfer all of the assets and liabilities of Women's College Hospital to the amalgamated corporation as though Women's College Hospital were amalgamating with Sunnybrook Hospital and Orthopaedic and Arthritic Hospital and to allow Women's College Hospital to continue to exist as a separate corporation..."[14]

Bill 51 limits the options available to SWCHSC when considering its governance, management and operational structures. Bill 51 also sets out explicit directions regarding the Women's College Hospital site, located at 76 Grenville St. This being given, Bill 51 does provide mechanisms to modify its directions. Further implications of Bill 51 on the SWCHSC Corporation are discussed below.

The Women's College Ambulatory Care Centre (WCACC)

Bill 51 mandated the establishment of ambulatory care women's health programs, including a sexual assault care centre, at 76 Grenville St. The Women's College site is currently home to the Women's Ambulatory Care Centre (WCACC), in addition to the inpatient and outpatient P&G Program. Some ambulatory women's health services continue to be located at 790 Bay St. Further consolidation will not be possible until the P&G Program vacates 76 Grenville St.

SWCHSC envisions building on the current WCACC to create a Women's Health Institute (WHI). Planning for the WHI is in early stages, but the direction is towards creating a physical and virtual institute designed to research, implement and evaluate best practices related to gender and sex differences in women's health. The WHI would incorporate the current Women's Health Research Centre and the WCACC.

It is too early to evaluate the specifics of the proposed WHI, but the potential exists to create something truly transformational. The Institute could bring together women's health expertise from across the City of Toronto and act as a provincial, or even national, centre for excellence in women's health.

Achieving the vision of excellence in women's health will require leadership, collaboration and consideration of new operating models. The WHI will also need physical infrastructure to flourish. Developing the WHI at 76 Grenville St. will require the space currently occupied by the P&G Program.

Governance and Management

SWCHSC has a complex governance and management structure. This is greatly attributable to its beginning as the merger of three distinct and strong health care organizations. It is the Review Team's opinion that SWCHSC's organizational structure impedes realization of its vision.

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[14] Sunnybrook and Women's College Health Sciences Centre Act, 1998

Bill 51 dictates that the SWCHSC Board of Directors have strong representation from each of its founding institutions. In addition, Bill 51 dictates the continued existence of Women's College Hospital as a separate corporation. As a result, SWCHSC is in the unenviable position of having two Boards of Directors and two Medical Advisory Committees. The Boards of Directors and Medical Advisory Committees work well together, but the arrangement does not facilitate clear communication or accountability. The organization has implemented numerous workaround solutions.

The Women's College Hospital Corporation is responsible for the management and operation of the programs on the 76 Grenville site, in accordance with Bill 51. There is a Chief Executive Officer of the Women's College Ambulatory Care Centre who reports directly to the WCH Board and to the CEO of SWCHSC. There is both a clinical and administrative management structure at the Women's College Campus. The majority of business and clinical support managers report dually through the WCACC structure and the SWCHSC structure.

The P&G Program medical and administrative leadership is excellent. Leaders are clearly aware of the needs of physicians and staff. They advocate strongly for their patients and have built family centred models of care. Their dedication to the P&G Program and tireless work to resolve the current situation is evident.

The site-specific management model at SWCHSC has both advantages and disadvantages. It is clear that staff located at 76 Grenville St. value the warm, collegial atmosphere often found in smaller institutions. Management at 76 Grenville have an intimate knowledge of their programs and facilities. WCACC management advocates strongly for its programs, the P&G Program in particular.

However, it is not as apparent that management at the Bayview Campus are as familiar with the needs and issues at 76 Grenville. There is no question that management at the Bayview Campus supports the WCACC, and its programs. Indeed, both the SWCHSC Senior Management Team and the Board of Directors have been advocating for capital development to accommodate the P&G Program for many years. However organizational structures and geography may have prevented Bayview Campus management from developing a thorough understanding of the conditions at 76 Grenville. A better understanding, and clear accountability for the 76 Grenville site, may have influenced past management decisions.

Corporate Relationship with Government

The current relationship between SWCHSC and the MoHLTC is tenuous. Both parties are frustrated with the current situation and lack of resolution. Both parties must take some responsibility for the lack of progress on the proposed capital project.

The MoHLTC has a detailed capital review and approval process. The MoHLTC has designed the process to help prioritize projects and ensure the construction of quality, cost-effective patient care facilities, but the experience is often frustrating for hospitals.

Clarification and resubmission of documents is the norm. A positive, collaborative relationship between the hospital and the MoHLTC is critical to move the process forward. Both SWCHSC and the MoHLTC must work to build a trusting relationship.

Affiliated Organizations and Associations

SWCHSC has a host of affiliated organizations and associations, many with roots in one of the three founding organizations. There is now one Sunnybrook & Women's Foundation. There is one Research Institute and the Centre for Research in Women's Health. There are volunteer associations and advocacy groups, such as the Friends of Women's College. In addition, SWCHSC has formal and collaborative relationships with the University of Toronto and other health care organizations in the City of Toronto.

Corporate Alignment

SWCHSC's mission is:

"To create an academic centre of excellence that in partnership with its communities and fully affiliated with the University of Toronto, ensures a full range of high quality, values-based, patient-centred services and is a leader in women's health."

SWCHSC's vision is:

"Sunnybrook & Women's will transform health care."

The P&G Program is well aligned with both SWCHSC's vision and mission. It is a pivotal component of the organization's mission to be a leader in women's health.

The proposal to move the P&G program to the Bayview Campus will only strengthen SWCHSC's mission and vision. The P&G program is a cornerstone of the women's health mission. Academic centres of excellence require quality infrastructure to thrive. If SWCHSC is to remain a leader in women's health it must retain its P&G program, and the program must have adequate infrastructure.

There is near unanimous support for the P&G move to the Bayview Campus. The entire SWCHSC community, including its affiliated institutions and stakeholders, supported relocation to the Bayview Campus. It is also important to note that The University of Toronto, the Hospital for Sick Children, the Ontario Criticall Program and the Child Heath Network also supported this option.

f. Risk Management and Support

SWCHSC Risk Management and Support

P&G is the only inpatient program remaining at the Women's College Campus and as described above, current facilities are inappropriate for patient care. The physical environment creates risk in the NICU and Birth Unit. The lack of inpatient support

creates significant risk for obstetrical or gynaecologic patients experiencing critical illness.

To manage these risks SWCHSC has implemented a number of internal and external support strategies including:

- Screening adult patients and diverting those with complex co-morbidities to alternate organizations;
- Implementing policies and procedures to manage women who unexpectedly become critically ill (e.g. Code Omega for an obstetrical haemorrhage);
- Transferring patients to the Bayview Campus, or an alternate organization, if they require critical care services;
- Creating an ICU / Stabilization and Transfer Unit;
- Investing in enhanced diagnostic services coverage (Labs and Medical Imaging);
- Providing limited on-site acute medicine support and on-call coverage for hospitalists;
- Developing collaborative relationships with Mount Sinai Hospital and the Hospital for Sick Children, both for emergency consultation and patient transport when necessary.

The cost associated with these strategies is a minimum of $3.0M annually.

Despite these strategies, weaknesses are evident:

- A single individual provides obstetrical medical support, with occasional assistance from hospitalists and trainees. This individual sustains the 24-hour service with almost no support from her Department. She does this at great personal cost. Her current workload is clearly not sustainable.
- Interventional radiography is not available. This is standard of care in high-risk obstetrics.
- Critical events occur infrequently. This makes it difficult to maintain critical response skills and capacity in the Stabilization and Transfer Unit and clinical support services.
- It is difficult to provide 24-hour laboratory and diagnostic imaging services due to personnel shortages.
- The distance between the Bayview Campus and Women's College makes it difficult for medical and surgical consultants from the Bayview Campus to attend to patients in a timely manner.

In summer 2004 SWCHSC commissioned both a medical and safety / sustainability review of the P&G Program[15]. These reviews concluded that the current environment is safe, but not sustainable. The present review concurs with this conclusion. Through the diligent efforts of the P&G Program and a small number of exceptional individuals,

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[15] External Medical Review of the Sunnybrook & Women's Perinatology and Gynaecology Program, Dr R. Liston, June 2004;
External Nursing and Administration Review of the Sunnybrook & Women's Perinatology and Gynaecology Program, J. Rush, July 2004

safety of care remains acceptable. Risk management data supports this conclusion. However, the safety net is weak and is unable to sustain the P&G Program. There is no evidence of unsafe care to date, but the current environment will lead to unsafe care, despite the efforts listed above.

The Liston and Rush reviews made a series of recommendations to improve the P&G Program. The chief recommendation was to relocate the P&G Program to the Bayview Campus. Recognizing that would take several years to complete, both reviews included recommendations to strengthen the P&G Program in the interim. This included additional physician recruitment, enhanced obstetrical OR capacity and a variety of clinical support initiatives.

g. Current State Conclusions

Quality of Care
The P&G Program delivers quality care. Any deficiencies are related to infrastructure and capacity rather than people.

Access to the P&G Program is restricted at SWCHSC, as it is at other centres. There are insufficient NICU Level III beds in the GTA to meet demand. SWCHSC is frequently closed to NICU admissions and a limited number of women must be turned away due to lack of critical care supports. The Program's current location is not ideal for women and families living outside the City of Toronto.

The P&G Program delivers **appropriate** care. The Program fulfills its mandate to deliver tertiary services to women and neonates. Patient care outcomes are excellent.

Patients are extremely **satisfied** with their care. The P&G Program delivers family centred care, compassionate care. This is evident by the high number of women who choose to deliver at Women's College Campus despite the poor physical environment.

Patient care is currently **safe**. SWCHSC has implemented a number of internal and external strategies to mitigate clinical risk. There are few adverse events in the P&G Program. However, the current situation is not sustainable.

4. Regional Considerations

a. Regional Service Delivery Model

As described previously, regional demand for perinatology and gynaecology remains high in the GTA. The Child Health Network (CHN) has recently completed an extensive internal review to recommend the most appropriate care delivery model for obstetrical and paediatric services in the GTA. The CHN's vision for maternal/newborn and paediatric care in the GTA is:

> "Our vision is a responsive and capable system of maternal/newborn and paediatric care in the Greater Toronto Area centred on regional centres that are closely linked to community hospitals, community care providers and tertiary care facilities. Each element of the system will provide levels and types of care appropriate to its role and capabilities and will interact with other elements of the system to provide a seamless continuum of care to patients and their families."[16]

This vision translates into consolidation of services for both quality and efficiency. Under the proposed model, SWCHCS, Mount Sinai Hospital and the Hospital for Sick Children will continue to provide tertiary services. Non-tertiary services will consolidate from 24 to 15 sites, with four of these sites designated as Regional Centres.

The Child Health Network strongly supports moving the P&G Program to the Bayview Campus.

> "The delay in relocation of obstetrical services from the downtown campus is putting pressure on both of the/tertiary maternal/newborn centers and restricting the optimal use of beds within the network and has precluded this program from taking advantage of the array of critical care services available for mothers on the Sunnybrook site."

In addition to its recommendations regarding program consolidation and siting, The Child Health Network has determined 12 additional NICU beds are needed to meet current demand. The CHN proposes the following distribution:

Table 6: The Child Health Network Proposed Distribution of Level III NICU Beds

Hospital	Funded Level III NICU Beds	Proposed Level III NICU Beds
The Hospital for Sick Children	37	38
Mount Sinai Hospital	34	38
Sunnybrook & Women's College Health Sciences Centre	29	36
Total	**100**	**112**

In response to this recommendation, and to address some of its short-term facility challenges, SWCHSC has proposed a *Head Start* project at the Women's College Campus. This proposal would add 7 NICU beds and consolidate both units to one floor. Capacity for high-risk maternal care would increase accordingly (2 maternal high risk beds, 1 operative birthing room and 1 high risk labour room). The *Head Start* proposal would cost approximately $3.3M in capital[17].

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[16] Strengthening the Maternal, Newborn and Paediatric System by Design. IRC Phase 3 Report. The Child Health Network. March 2005.

[17] Source: SWCHSC Redevelopment Project Monthly Executive Status Report, Sept 2004. Includes escalation to April 06.

While the *Head Start* proposal adds capacity, it does nothing to address the clinical risk concerns previously discussed. In fact, increased activity may raise the potential for infectious disease outbreaks and other clinical risks. Increased activity is likely to add pressure to limited resources and may further destabilize the P&G Program. In addition, the $3.3M investment would be lost when the P&G Program relocates.

5. Proposed Options

The Review Team explored four options for the site and management of the SWCHSC P&G Program.

a. Maintain the complete P&G Program at the SWCHSC Women's College Campus.

b. Maintain only low risk obstetrics at the SWCHSC Women's College Campus; transfer the remainder of the Program to another academic health science centre.

c. Transfer high-risk obstetrics, neonatology and associated clinical services to Mount Sinai Hospital; transfer the remainder of the P&G Program to St. Michael's Hospital, St. Joseph's Health Centre and North York General Hospital.

d. Transfer the complete P&G Program to the SWCHSC Bayview Campus.

The four options and their implications are described below.

a. Maintain the Complete P&G Program at SWCHSC Women's College Campus

The clinical and capital reviews do not support maintaining the P&G Program at the Women's College Campus.

In its current state, the medium term impact on patient care, education and research would be detrimental. There is little question that accessibility, safety and patient satisfaction would suffer. SWCHSC would be unable to fulfill its role as a regional provider of high quality tertiary women's health services. This would contravene Bill 51 and be inconsistent with national, provincial and local standards.

Maintenance of any P&G inpatient activity at the Women's College Campus would require repatriation of inpatient medical and surgical services to that Campus for patient safety and Program sustainability. This would:

- Require extensive capital development on the Women's College Campus;
- Disrupt plans to create a truly visionary women's health ambulatory care institute on the Women's College site;
- Result in operational inefficiencies and potential medical coverage challenges due to multi-campus operations; (Current inefficiencies are estimated by SWCHSC to be approximately $7M annually)

- Be prohibitively expensive.

b. Maintain Only Low-Risk Obstetrics at the SWCHSC Women's College Campus

For similar reasons described above, maintaining low risk obstetrics at the Women's College Campus is not recommended. It is the worst of the four options as the obstetrics program would be isolated and would lack the high-risk expertise to manage women who deteriorate unexpectedly. Critical incidents are often unpredictable and even a low risk obstetrics program requires inpatient medical and surgical support.

In addition to the drawbacks listed above, dividing the existing P&G Program would disrupt a highly effective team. The current culture is collegial and patient centred. It would be difficult to replicate and would be a shame if it were lost.

P&G Program Relocation to a Full Service Inpatient Facility

As discussed, the P&G Program must be relocated to an appropriate facility with inpatient medical and surgical support. Regardless of the institution, relocation would address many of the identified safety and sustainability concerns:

- The new facility would meet National and Provincial infrastructure standards;
- Inpatient medical and surgical support, including a full adult Intensive Care Unit, would be available;
- High quality patient care infrastructure would facilitate recruitment, retention and build team morale;
- A stable, secure environment would promote research and innovation;
- Efficiency gains would be achieved through elimination of inpatient activity and support at the Women's College Campus.

c. Transfer Tertiary P&G Services to Mount Sinai Hospital and Remaining P&G Services to Three Partner Hospitals

Description

Mount Sinai Hospital has advanced a proposal to consolidate tertiary P&G services on its site, with two physically separate NICUs. Three institutions with existing Level II NICUs would share low-risk obstetrics and Level II neonatal care. Mount Sinai Hospital would address infection control on its site through facility design and distinct staffing. The Hospital for Sick Children would provide neonatal emergency back-up facilities in the event of a facility wide disaster. Potential partner institutions have not validated this proposal.

Mount Sinai Hospital's existing perinatal program requires extensive renovation to meet current standards. This proposal would address the capital needs of all tertiary perinatal services in Toronto. Mount Sinai Hospital believes its proposal would result in significant capital and operational cost savings and better care for mothers and babies.

A P&G Network of Excellence is central to the proposal. The Network, consisting of Mount Sinai Hospital and its partner institutions, would bring together common clinical and teaching expertise to serve a large geographic area, with the objective of providing coordinated patient care, teaching and research of the highest quality.

Strengths

There are notable strengths to the Mount Sinai Hospital option, specifically:

- The proximity of Mount Sinai Hospital to the Hospital for Sick Children and the ease of collaboration based on location;
- The proximity of Mount Sinai Hospital to the University of Toronto and the ease of access for students and teachers;
- Critical mass for world class research, education and comprehensive patient care programs;
- The strength of the Network of Excellence model, building strong academic and clinical support relationships between institutions across the City of Toronto.

Challenges

Despite these strengths, the review does not support consolidation of tertiary perinatal services to a single site.

In their review of North American and European models, Reviewers could find no example of tertiary perinatology consolidation in a metropolitan area the size of Toronto. Total consolidation raises concerns regarding:

- Risk management:
    - Separation of the medical staff and students would be extremely difficult; caregivers are often responsible for transmitting infection.
    - The Hospital for Sick Children does not have the capacity to accommodate 100 percent of Toronto's tertiary neonatal activity in the event an emergency.
    - Mount Sinai Hospital would be the sole tertiary maternal services provider. Women would need to be transferred to a Level II facility in the event of emergency.
    - GTA as the 5th largest metropolitan area in North America will have one maternal newborn program. The implication of this is worrisome.
- Patient access:
    - Mount Sinai Hospital is conveniently accessed by public transit. However, it is difficult to access by car.
    - Reproductive growth is anticipated in the GTA 905 area, not the downtown core.
- Development of diverse clinical expertise:
    - Consolidation to a single site would prevent leveraging existing niche clinical expertise at other sites, specifically in cancer, cardiac and critical care services.
- Cultural environment:
    - A consolidation of this magnitude would have a significant impact on Mount Sinai Hospital.

- SWCHSC would be devastated by the loss of its P&G Program. There would be significant implications for staff, physicians, students and researchers.

- Community support:
  - The community strongly favours the relocation of the P&G Program to the Bayview Campus. The support for this option is nearly unanimous. The entire SWCHSC community, including its affiliated institutions and stakeholders, the University of Toronto, the Hospital for Sick Children, the Ontario Criticall Program and the Child Health Network support relocation to the Bayview Campus.

Cost

The Mount Sinai Hospital proposal is estimated to cost approximately $120M. This includes $50M to renovate its existing perinatal service, $60M to build a new perinatal unit and $10M to expand services at three partner institutions. It is important to note that this estimate is based on preliminary assumptions and has not been confirmed by any of Mount Sinai Hospital's proposed partners. The original Bayview Campus P&G capital development was estimated to cost approximately $130M, including allocation for a central utilities plant. By consolidating, Mount Sinai Hospital predicted it could bring both Level III NICUs to current standards and save the MoHLTC approximately $70M.

As will be discussed in the capital section of the review, current estimates to relocate the P&G Program to the Bayview Campus are significantly lower than originally estimated. In addition, given current perinatal capacity constraints in the GTA, the final cost of expansion at the three proposed partner institutions would likely be significantly higher than predicted. Increased costs at the partner institutions would likely consume all potential savings. Capital savings associated with the Mount Sinai option would be minimal if any.

Given the unconfirmed nature of the Mount Sinai Hospital cost estimate, and the challenges described above, potential savings are not significant enough to justify the Mount Sinai Hospital option.

However, Mount Sinai's vision for a P&G Network of Excellence impressed the Review Team. The Review Team felt this vision could be extended beyond the Mount Sinai Hospital proposal. A Network of Excellence incorporating two tertiary perinatal centres is possible, building on the existing Child Health Network proposal. Strong collaboration between the members of the Network could achieve further excellence in patient care, education and research.

d. Transfer the Complete P&G Program to the SWCHSC Bayview Campus

Patient care, education and research interests must drive the site and management model for the P&G Program. The clinical review demonstrated a clear advantage to move the P&G Program in its entirety to the SWCHSC Bayview Campus. Specifically, relocation to the Bayview Campus would:

- Achieve the benefits of relocation to an inpatient facility;
- Result in the co-location of high risk maternity services with well developed critical care, cardiology and cancer programs, creating the potential for further excellence in subspecialty obstetrics;
- Reduce the risks associated with infection or facility disaster by dividing capacity across institutions;
- Increase accessibility for GTA 905 patients by providing care closer to home;
- Allow SWCHSC to proceed with plans for a Women's Health Institute to be located at 76 Grenville St.;
- Allow SWCHSC to fulfill its mission to"ensure a full range of high quality, values-based, patient-centred services and (be) a leader in women's health";
- Be consistent with Health Services Restructuring Commission Directions and Bill 51;
- Be consistent with regional plans for P&G services, specifically those advanced by the Child Health Network and the Criticall Program of Ontario;
- Be aligned with the community, including academic institutions, research bodies, health care organizations and community advocacy groups;
- Provide P&G educational opportunities for students and health care providers currently located at the Bayview Campus;
- Maintain an organizational environment that has fostered high quality, internationally recognized women's health research;
- Safeguard the current culture of high quality, patient and family centred care;
- Maintain a high functioning, cohesive team of skilled health professionals;
- Result in two Foundations fundraising for tertiary Toronto P&G services.

The Bayview Campus is distant from its downtown partners including the University of Toronto and the Hospital for Sick Children, but this challenge is not insurmountable. Telehealth technology is shrinking the distance between health care professionals and patients. SWCHSC is fully affiliated with the University of Toronto and educates thousands of students annually.

As stated, patient care, education and research interests must drive the site and management model for the P&G Program. Relocation to the Bayview Campus is the correct model for the P&G Program. The challenge remains the SWCHSC proposed P&G capital design and cost.

6. Capital Review

The Capital Review Team's objectives were threefold:

- Follow the direction indicated by the clinical review;
- Maintain the scope and quality of services approved in the P&G Program Functional Plan;
- Recommend a cost-effective capital and operating solution.

a. Description of the Current Bayview Campus P&G Capital Plan

SWCHSC is currently proposing a four-floor addition to the existing M-wing at the Bayview Campus. The P&G Program would occupy the first 2.5 floors and the Orthopaedic and Arthritic Institute (OAI) would occupy the remaining 1.5 floors. SWCHSC has divided the M-wing expansion into 2 projects – construction of the M-wing shell and fit-out of the program space.

This project includes both a penthouse and central utilities plant to provide mechanical and electrical support. The central utilities plant (CUP) will support the M-wing and Emergency Department expansions, as well as additional research space and existing facilities. As the CUP will support multiple areas, SWCHSC has presented the project separately.

The capital cost estimate for the 2.5 floor P&G Program is currently $127M, excluding costs associated with the Central Utilities Plant. The P&G Program's share of the CUP cost is approximately $4.5M[18].

b. Functional Program

The MoHLTC has approved SWCHSC's *Functional Programs for Perinatal and Gynaecology Services*. Specifically, the MoHLTC supports:

- 4,250 births
- 112,260 ambulatory care visits
- 68 beds
    - 20 LBR/LBRP
    - 23 high risk
    - 25 combined care

The 2003 Addendum to the Perinatal and Gynaecology Functional Program provides the space and program revisions in accordance with all agreed-upon changes between SWCHSC and the MoHLTC. The Review Team considered the approved functional program when evaluating the current capital design.

c. Current Design Strengths

The current P&G design is impressive. SWCHSC worked with its architects to create design that was both functional and attractive. The 2.5-floor design accommodates the entire P&G Program, with the exception of inpatient Gynaecology and the Maternal Infant Research Unit[19]. This facilitates efficient operations and promotes collaboration.

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[18] Total M-wing 4 story shell CUP allocation is $7.16M. Costs are allocated according to space. ($7.16M/ 8*5 = $4.47M)

[19] All Gynaecology beds will be relocated to an existing inpatient unit at the Bayview Campus, and there will be no capital cost associated with this relocation. MIRU will remain in its current space.

The environment includes space for education, dedicated staff areas and program support. The design meets all national and provincial standards for both adult and newborn care.

The current functional program incorporates many leading edge patient centred philosophies. These include:

- Dedicated family space adjacent to each NICU bed;
- A high percentage of single patient rooms, in response to patient preferences and infection control concerns;
- A Labour, Birthing Recovery (Postpartum) (LBR(P)) model of care.

The current design would result in a functional, pleasing environment, with several exceptions discussed below. However, the proposed design is larger than the approved functional program and the cost is prohibitive. The Review Team feels there is an opportunity to reduce the cost of the capital project while maintaining space functionality.

d. Current Design Challenges

Project Cost

The first, and most significant, challenge to the current P&G capital design is its cost. The current P&G design cost estimate is $127M, including ancillaries and fixtures, furnishings and equipment (FF&E). However, the total project cost is approximately $135M as it includes an additional $4.5M for the Central Utilities Plant (CUP) and $3.3M for a *Head Start* Project at the Women's College Campus.

This cost must be considered in light of SWCHSC's other planned capital developments including the Orthopaedic and Arthritic Institute, the Emergency Department and the full Central Utilities Plant. The estimate for Total Phase 1 projects is approximately $227.8M.

The MoHLTC is not confident in SWCHSC's ability to finance its share of the capital development. The Hospital has experienced operating shortfalls in recent years further raising Ministry concerns. The existing cash flow plan is dated and raises several issues including the use of the Hospital's own operating funds and a repayment schedule ending in 2014.

The Capital Review Team's first objective was to validate current SWCHSC cost estimates. Key findings were as follows:

- Discrepancies were noted in allocating the cost of the M-wing shell between the OAI and the P&G Program.
- The methodology for determining the building grossing requirements was unclear.
- SWCHSC cost estimates were based on 2001 figures, with escalation to 2003.
- The methodology for determining the requirements and cost allocation of the Central Utilities Plant and M-wing penthouse was unclear.

- P&G sketch drawings did not match the MoHLTC approved functional program; there was additional space in the sketch drawings not identified in the approved functional program.

Orthopaedic and Arthritic Institute

Linking the P&G Program capital development with the OAI capital development is the second significant challenge to the current proposal. The MoHLTC has indicated the OAI is to remain at its Wellesley St. location for the foreseeable future. The OAI was to occupy the top 1.5 floors of the 4-floor M-wing addition. This prompts an examination of the 4-floor design and brings into question the necessity for the top 2 floors. If possible, accommodating the P&G Program on 2 floors would result in significant cost reduction opportunities.

It is important to note that SWCHSC is proposing to proceed with the full 4 floors regardless of the direction for OAI. SWCHSC would shell in the top 2 floors at their expense, providing capacity for anticipated future growth. Constructing the 2-floor shell simultaneously with the P&G floors could prove more cost effective than delaying construction. Section 7 of this report, the *Review Recommended Solution*, explores this option in further detail.

Atrium

The third challenge posed by the current P&G Design is the extension of the existing atrium to subsequent floors. This design generates space inefficiencies and is inconsistent with current MoHTLC guidelines.

Alignment with the Functional Program and Effective Use of Space

The final challenge relates to alignment with the approved functional program and effective use of space. The Review Team examined the current P&G design and functional program with the goal to reduce capital costs while maintaining Program scope and quality. Specifically, the Review Team looked for opportunities to enable accommodation of the P&G Program on 2 floors of the M-wing.

Several discrepancies were noted between the approved functional program and the sketch drawings, major items being:

- The sketch plans showed all private, single patient rooms. SWCHSC made this change following SARS in response to infection control concerns.
- SWCHSC added 2 additional housekeeping rooms and several anterooms, also in response to infection control concerns.
- SWCHSC added two rethermalization rooms to reflect its new practice of reheating food on the units.
- The comparison of the functional program and sketch drawings was provided in net square feet, not departmental gross square feet, which made analysis of the total discrepancy challenging.

In addition to these discrepancies, the Review Team identified several potential opportunities to reduce space allocation, while maintaining the spirit of the functional

program. It is important to note these were preliminary observations and required discussion with, and validation by, SWCHSC. These items are part of SWCHSC's approved functional program. The Review Team suggested that SWCHSC examine and confirm the necessity for these areas as part of the process to downsize from 2.5 floors.

- **Labour, Birthing and Recovery / Post Partum Rooms**
  SWCHSC's caesarean section rate is currently 33.5 percent, six percent higher than predicted in the functional program. An increase in the c-section rate may decrease the required number of LBRPs.
- **NICU Designated Family Space**
  The designated family space at each NICU bed is family centric, but costly. It is also unclear that these rooms would be fully utilized. There may be opportunities to partially reduce this space to reflect anticipated utilization.
- **Ambulatory Care Model**
  The ambulatory clinics are currently designed using a physician office model rather than a modular format. A multi-use, modular clinic format would generate operational efficiencies and flexibility in space utilization.
- **Neonatal Follow-up Clinic**
  Neonatal follow-up may be done elsewhere on the Bayview Campus, or off-site, depending on the physician coverage model.
- **Ambulatory Gynaecology**
  Urogynaecology could potentially be located elsewhere.
- **Administrative and Support Spaces**
  - The number and size of offices, meeting rooms and classrooms appears high. There may be an opportunity to reduce administrative space.
  - A radiology viewing room should not be necessary with digitized images coming directly into clinical areas.
  - The gift shop could potentially be located elsewhere.

7. Review Recommended Solution

a. Analysis Process

The clinical review strongly supports moving the P&G Program to the Bayview Campus, but the current 2.5-floor M-wing design is challenged by the direction that OAI is to remain at the Wellesley site. As the purpose of the top 1.5 floors of the M-wing is under question, the Review Team explored the opportunity to reduce the P&G Program footprint to 2 floors of the M-wing. This would provide the flexibility to proceed with a 2-floor expansion or 2-floor expansion plus 2-floor shell for future capacity. Both options would be less costly than the original design.

Preliminary analysis suggested a 2-floor M-wing design could accommodate the P&G Program without reducing the scope or quality of services. The Review Team did not believe SWCHSC could reduce total space requirements by 20%, but felt a 2-floor solution was possible by:

- Aligning the sketch drawings with the approved functional program – The Review Team suspected that the sketch drawings were larger than the functional program, although it was not known by how much as departmental gross areas were not provided.
- Locating some components of the functional program in existing space at the Bayview and Women's College Campuses.
- Re-examining and confirming the need for specific components of the approved functional program, as discussed above.

Furthermore, the Review Team felt that re-examining the CUP, penthouse and atrium would generate additional cost saving opportunities. The Review Team identified the need to update all costing to current dollars and re-allocate shared elements between infrastructure projects. It was also clear that SWCHSC needed to redevelop its financing and cash flow plan to reflect current realities.

The Review Team shared their preliminary findings with SWCHSC and requested that the hospital provide clarification and consider their initial directions. The Review Team encouraged SWCHSC to determine how it might accommodate the P&G Program on 2 floors of the M-wing, using the suggestions listed above as a starting point. Reviewers felt it was important that SWCHSC determine the specifics of the P&G Program design as they would occupy the space. For a complete list of the questions and issues communicated to SWCHSC, please see Appendix E.

SWCHSC responded to the Review's initial directions and provided clarification where requested. The Capital Review Team analysed SWCHSC submissions and updated all capital costs, including the cost of a 2-floor P&G capital design. The remainder of the capital review section presents the Capital Review Team's findings and recommendations.

b. P&G Design and Related Infrastructure

<u>P&G Program Two-Floor Design</u>

SWCHSC determined it is able to accommodate the P&G Program on two floors of the M-wing by:

1. Reducing the Program size from the March 2003 Functional Program Addendum from 86,660 net square feet to 78,115 net square feet.
2. Locating 9,940 net square feet of ambulatory obstetrics and gynaecology activity in existing space at the Bayview Campus and Women's College Campus.
3. Utilizing 3,015 net square feet on M-5 that had previously been designated for clinical support activities.
    - The clinical support activities will be absorbed in existing departmental space at Bayview Campus.

The Review Team endorses a 2-floor M-wing P&G Program and supports the principle that SWCHSC determine the specifics of their design. Please see Appendix F for a summary of the changes SWCHSC made to enable the P&G Program to fit on two floors

of the M-wing. Appendix G includes the Review Team's analysis of the proposed space modifications.

The Review Team noted several inconsistencies in the SWCHSC documentation relating to the size of the approved Functional Program, sketch plans and the proposed modification. Appendix G discusses these in detail. Regardless of these discrepancies, SWCHSC must be committed to achieving the P&G Program room elements within the two floors of M-wing. The Review Team assumed a 2-floor M-wing capital development for the remainder of its analysis.

Central Utilities Plant

SWCHSC is proposing a Central Utilities Plant (CUP), infrastructure and air handling unit project at a total cost of $31.4M[20]. This project is required to support M-wing capital development, the Emergency Department renovation and expansion and future research facilities. The project also includes infrastructure renewal, upgrades to meet code and provide redundancy as well as capacity for future flexibility.

Analysis of the CUP and infrastructure project is beyond the scope of the P&G Review, but a clear understanding of the impact of the project on M-wing capital development was necessary to determine the optimal capital approach for the P&G Program.

SWCHSC presented the CUP and infrastructure plan as a separate project with no cost allocation between primary projects. The Review Team and the MoHLTC requested that SWCHSC allocate costs between the following categories to facilitate understanding and decision making:

- Emergency Department;
- M-wing expansion including a two floor P&G Program and an additional 2-floor shell;
- Research facilities;
- Infrastructure renewal;
- Code / redundancy;
- Management discretion / potential demand for renovation of existing.

The 4-floor M-wing development represented 22.8%, or $7.16M of total CUP and infrastructure project costs. Cost allocation was even between the 2-floor P&G Program and the 2-floor M-wing shell; there was an allocation of $3.58M to both the P&G development and the 2-floor M-wing shell out of a total CUP and infrastructure cost of $31.41M. The Capital Team reviewed these allocations and judged them sufficient. The Review Team used these allocations for costing.

It is important to note that the allocation is for accounting and analysis purposes and cannot be used to determine minimum costs. Some components of the CUP infrastructure project are fixed cost. The allocation between primary projects is subject to change if the primary projects are altered.

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[20] This includes escalation to Feb 06.

Atrium

At the request of the Review Team, SWCHSC reviewed its ability to infill the M-wing atrium. HoK Urbana Architects indicated SWCHSC could modify the existing design to infill the atrium on floors 5, 6 and 7. SWCHSC would be unable to infill the existing atrium, including the 4th floor, without significant impact on clinical areas in the building. Structural, mechanical and electrical, acoustic and cost consultants provided supporting analysis.

The infill would require the use of lighter weight materials than are normally used for health care construction. As a result, the infilled area and some adjacent areas would have the potential for structural vibration. This space would not be suitable for patient care and laboratories, but could be used for offices. In addition, the existing galleria would be closed off from daylight above, negatively affecting the perception and atmosphere of the space.

Hanscomb Ltd. indicated a preliminary cost estimate of $300K - $400K to infill the atrium areas as described above. Given the cost premium to infill the atrium, and the challenges described above, the Review Team sees no compelling reason to modify the design to eliminate the atrium.

c. Capital Approach

Potential Options and Evaluation Criteria

The Review Team identified 7 potential capital approaches that met the clinical review direction. All options included a 2-floor P&G Program design and incorporated findings regarding the CUP and Infrastructure project and the atrium. The options included:

1a. Two floors of P&G fitout with no capacity for future M-wing expansion.
1b. Two floors of P&G fitout with limited capacity for future M-wing expansion through inclusion of interstitial space.
1c. Two floors of P&G fitout, with interstitial space and two floors of shell, tendered as separate projects.
2. Four floors of shell and two floors of P&G fitout, tendered as a single project.
3. Two floors of P&G fitout, with interstitial space, with 2 additional floors of shell deferred.
4. Four floors of shell and two floors of P&G fitout, tendered as separate projects.
5. Four floors of shell and two floors of P&G fitout, tendered as a modified stipulated sum project.

To ensure objective analysis, the Review Team evaluated all options against the following criteria:

1. For patient safety reasons, the timeline for relocation of the P&G Program to the Bayview Campus must be as expeditious as possible. Speed is of the essence.

2. The most cost-effective development solution must be utilized.

3. The project must be affordable.

4. The solution must enhance the efforts of the Sunnybrook and Women's Foundation in raising the local share by early and visible construction progress.

5. The facility design must be flexible to meet future capital needs and growth.

6. The P&G capital solution must be aligned with other pending capital development projects namely the Emergency Department renovation/expansion and the Central Utilities Plant development.

7. The approach must abide by the intent of current MoHLTC capital planning policy.

Recommended Capital Approach

Evaluation against the criteria supports Option 2 - constructing four new floors on top of the existing M-wing building, consisting of 2 floors of P&G fitout and 2 floors of shell for future projects. Also included is a metal clad mechanical and electrical penthouse and allocation for the Central Utilities Plant and infrastructure. This is proposed as one project and would be tender ready in Spring 2006. The expected P&G occupancy date is Spring 2009. Appendix H describes all options, costing and the evaluation matrix.

Option 2 offers superior flexibility, ease of implementation, a reasonable P&G occupancy date and is the most cost-effective alternative.

Flexibility

SWCHSC will likely require capacity for future growth within the next 5 years. The Bayview Campus site offers limited opportunities for capital expansion. The M-wing building can structurally support an additional 4 floors and its location is ideal for patient care services.

A four-floor M-wing expansion is the preferred option as it will provide SWCHSC the necessary flexibility to manage future capital growth demands. It will also assist with long-term master planning for the Bayview Campus. Limiting the current M-wing expansion to two floors will negatively affect flexibility for future growth. The inclusion of interstitial space does not guarantee construction of an additional two M-wing floors.

Ease of Implementation

The proposed solution is the easiest to implement. Issuing the project as a single tender, with concurrent construction of the shell and P&G fitout, will result in better alignment between shell and P&G plans. This reduces the risk of unforeseen complications and contingency expenditures. Construction management is straightforward compared to two separate tenders or a modified stipulated sum tender.

Tendering the project in Spring 2006 offers opportunities to sequence Phase 1 capital development projects. SWCHSC could proceed with the Emergency Department and

Central Utilities Plant before P&G. This would prevent construction overload and mitigate associated risks. A Spring 2006 tender date also provides sufficient time to prepare P&G tender documents and receive necessary approvals from the MoHLTC, provided work is initiated immediately and the approval period is reasonable.

Constructing the 4-floor expansion as one project is also easier to implement than deferring construction of the top 2 floors. The top floor of P&G would require interstitial space to limit the effect of future vertical expansion. Despite the interstitial space, some disruption to P&G would be inevitable. In addition, future vertical expansion would require disassembly and relocation of the mechanical and electrical penthouse. This represents a lost investment. The interstitial space does not represent value for money.

Occupancy

Under the proposed 4-floor option, P&G would relocate to the Bayview Campus in Spring 2009. This is six months later than the 2-floor single tender option and one year later than the 4-floor parallel shell and P&G fitout option. Issuing the project as a single tender will accelerate the occupancy date by 6 months compared to issuing separate tenders for the shell and fitout.

The objective is to relocate the P&G Program as quickly as possible to the Bayview Campus, but this must be accomplished in a cost-effective, well-planned manner. Parallel construction of the M-wing shell and P&G fitout carries significant coordination and financial risk. This approach carries a minimum $6M premium before considering additional costs due to construction contingencies and change orders. MoHLTC capital planning policy does not generally support this approach. Constructing only 2 floors of P&G accelerates the occupancy date by 6 months, but severely limits flexibility for future growth.

The Review Team worked with SWCHSC to determine the P&G occupancy dates associated with various capital approaches. It is important to note that with effective construction management, SWCHSC may reduce the 3-year planning and construction time period. Experience with similar capital development projects suggests a possible acceleration of up to 6 months.

Cost

The Review Team's analysis indicates that the 2-floor M-wing P&G Program and 2-floor shell, issued as a single tender, will cost $136.3M. Costs are escalated to Spring 2006 and include all fees and ancillary costs. Total project costs include allocation for the Central Utilities Plant and Infrastructure project. This is the most cost effective capital approach if capacity is required for future growth.

Table 7: Option 2 Capital Cost

Project Element	Cost
First 2.0 Floors M-wing shell	$ 53.5 M

P&G Occupant Fitout of M-wing	$ 43.7 M
P&G FF&E	$ 7.5 M
CUP and Infrastructure Allocation	$ 3.6 M
Subtotal P&G, CUP and Infrastructure (part)	*$ 108.2 M*
Upper 2-floor M-wing Shell	$ 24.5 M
Upper 2-floor shell CUP and Infrastructure Allocation	$ 3.6 M
Total cost	**$ 136.3 M**

As stated, single tender of a 4-floor M-wing shell and 2-floor P&G Program is the most cost-effective long-term solution. This option is the least expensive of the 4-floor expansion approaches. The Review Team's analysis indicates that deferring construction of the top 2 floors to Fall 2009 would cost a total of $166.4M ($109.1M for the 2-floor P&G Program and $57.3M for the 2-floor shell, including CUP and Infrastructure). The premium to defer construction is $30.1M. This option has no financial merit as the need for future capacity is almost certain.

The recommended option will also affect the Foundation. If the M-wing shell and P&G fitout were tendered separately, shell construction could begin in Fall 2005. Visible construction will give credibility to the project and assist the Foundation in fundraising efforts. The recommended solution proposes a tender date of Spring 2006 for both the shell and P&G fitout, a delay of 6 months. This may present a challenge for the Foundation, but any difficulties should be offset by visible construction in the Emergency Department and additional time to fundraise before P&G construction.

d. Affordability

Project affordability is a key concern for the MoHLTC. SWCHSC's November 2003 Capital Variance Template indicated the P&G project would cost $121.8M, excluding the P&G Headstart project and CUP / Infrastructure allocation. The 2-floor M-wing shell would cost $19.1M. The total cost of Phase 1 construction was $331.5M. By Fall 2004 the cost of the P&G project alone had risen by approximately $6M to $127.4M.

The Capital Review Team validated original SWCHSC costing for P&G and the 4-floor M-wing shell. In current dollars the original SWCHSC proposal would cost approximately $166M. This includes escalation to anticipated tender dates and allocation for the Headstart and CUP and Infrastructure projects.

The Review recommended capital development represents a $30M savings compared to SWCHSC's original proposal. The volume and scope of services is maintained. Savings are a result of:

- A 2-floor M-wing P&G Program design;
- Re-use of existing spaces at the Sunnybrook and Women's College Campuses;
- Elimination of the Headstart project;
- Updated costing with improved allocation of shared elements.

This represents a more affordable solution for SWCHSC and the MoHLTC. Please see Appendix I for a detailed breakdown of the cost savings associated with the Review recommended solution.

As part of the Review recommended solution, SWCHSC would shell in the upper 2 floors of the M-wing at its own expense. If, and when, the upper 2 M-wing floors were occupied by MoHLTC directed services, SWCHSC would negotiate for repayment of the appropriate MoHLTC share. Building the upper 2 floors of the M-wing shell will cost SWCHSC $27.1M more than only building the 2-floor P&G Program, including the CUP allocation. This may raise short-term affordability concerns, but if deferred to Fall 09, the 2 –floor M-wing shell will cost $53.7M. Furthermore, revised financing and cash flow plans indicate SWCHSC is able to afford constructing the 4-floor M-wing expansion.

Capital Financing

SWCHSC did not present a thoughtful cash flow and financing plan as part of its original proposal. This reflects poor presentation rather than ability to finance the project.

The Reviewers are encouraged that the Sunnybrook and Women's Foundation has the ability to finance SWCHSC's share of the proposed capital project given the evidence presented to date. The Foundation presented a credible fundraising plan to the Review Team, endorsed by Ketchum Canada Inc. and supported by prominent members of the Toronto community. The Foundation currently raises in excess of $20M per year and successfully raised $40M in the silent phase of its Campaign for *Sunnybrook & Women's*.

The Review Team worked with SWCHSC to develop feasible and cost effective cash flow and financing plans for the capital development options. Cash flow and financing plans were developed for P&G and total Phase 1 projects. Phase 1 projects include a 4-floor M-wing shell, P&G fitout, the Emergency Department, and the CUP. Please see Appendix J for the complete capital cash flow plans.

The revised P&G project cost is $108.2M. Total Phase 1 projects will cost $186.2M, including P&G, the Emergency Department and Central Utilities Plant and Infrastructure Project. Phase 1 construction will be complete in fiscal 2008/09; P&G will relocate to the Bayview Campus in Spring 2009. All Foundation pledges will be in place by Q4 2008/09, with 69% of cash received for P&G and 76% of cash received for total Phase 1 projects. All required financing would be complete by fiscal 2010/11.

Table 8: SWCHSC Capital Project Financing

Source	P&G	Total Phase 1
MoHLTC	71.8M	103.6
S&W Foundation (Including interest, paid by S&W Foundation)	27.0	75.2
Interest paid by S&W	(2.8)	(4.8)

Foundation		
SWCHSC Capital Equipment Budget*	5.2	5.2
Operational Efficiency Savings after P&G Relocation*	7.0	7.0
Total	108.2	186.2

* Through discussions with the Review Team, SWCHSC agreed to commit $1.3M of its annual capital budget towards project repayment. Furthermore, SWCHSC recognizes that significant operational efficiencies will be achieved following the P&G relocation to the Bayview Campus. SWCHSC has agreed to commit $3.5M annually, from anticipated savings, towards project repayment beginning in fiscal 2009/10[21]. These allocations will continue until the capital project is fully paid in fiscal 2011/12.

Operating Cost

SWCHSC has not yet developed a post-construction operating plan for the P&G Program at the Bayview Campus. As a result, a detailed analysis of future operating costs is not possible at this time. However, certain conclusions may be drawn.

SWCHSC is currently providing inpatient services across three campuses. The incremental cost of maintaining the P&G Program at the Women's College Campus is approximately $7M[22]. This includes support for additional physician coverage, the ICU stabilization and transfer unit and risk management initiatives. If the P&G Program were transferred to the Bayview Campus, SWCHSC would save the majority of these costs.

SWCHSC would be expected to perform at clinical and administrative efficiency benchmarks. SWCHSC has an extensive administrative and clinical support infrastructure at the Bayview Campus that it can leverage for the P&G Program.

8. Estimated Time Frame to Implement Solution

For patient safety reasons, the P&G Program must relocate to the Bayview Campus as expeditiously as possible. However, speed must be balanced with appropriate time for planning and constructing the new facility. The Review recommended capital solution provides a P&G occupancy date of Spring 2009. Relocation should not be extended beyond that date as the current environment jeopardizes the sustainability of the P&G Program. Please see Appendix K for the Project Timeline.

The length of the design, tender and construction period depends on a collaborative relationship with the MoHLTC and a coordinated construction approach. With effective construction management, and an expedited MoHLTC capital review process, SWCHSC

[21] SWCHSC estimates approximately $7M of operational inefficiencies currently at the Women's College Campus. Allocation of the full amount towards project repayment would be imprudent as detailed planning for P&G relocation has not occurred. SWCHSC could expect to achieve a minimum of $3.5M in savings post P&G relocation. Further savings are possible, but should not be relied on for planning purposes.

[22] Same as footnote 21.

may be able to accelerate P&G relocation to the Bayview Campus. Experience at other centres suggests a possible acceleration of 3 to 6 months.

9. Conclusion

The SWCHSC Perinatology and Gynaecology Program Focused Review concludes that the P&G Program should be relocated in its entirety to the Bayview Campus as quickly as possible. The recommended site and management model best addresses patient care, education and research interests.

The P&G Program should be accommodated with a 2-floor M-wing expansion. In addition, a 2-floor M-wing shell should be constructed above the P&G Program to accommodate future growth. The recommended development will cost approximately $136.3M, including CUP allocation, ancillary costs, FF&E and escalation. The expected P&G occupancy date is Spring 2009.

10. Recommendations

a. Relocate the P&G Program to the SWCHSC Bayview Campus. Accommodate the Program with a 2-floor M-wing expansion. Construct an additional 2-floor M-wing shell for future capacity, at owner's expense. Tender the M-wing shell and P&G fitout as a single project in Spring 2006. The expected P&G occupancy is Spring 2009. Total P&G Project costs, including the 2-floor M-wing shell, will be $136.3M.

b. Do not delay the P&G Program relocation as the current environment threatens patient safety. Expedite the process wherever possible. This will require collaboration between SWCHSC and the MoHLTC.

c. Improve the relationship between SWCHSC and the MoHLTC. Develop a joint SWCHSC and MoHLTC work plan to expedite the P&G capital review process.

d. Do not proceed with the WCACC Head Start project. The P&G Program should not be expanded in its current environment. It is recommended the Child Health Network re-examine its proposed regional NICU bed distribution in light of Women's College Campus constraints. Future NICU bed growth at the Bayview Campus would be possible.

e. Commission a third party firm to review contract and tender documents at 90-100% completion. The purpose is to ensure that the mechanical, electrical and architectural components of the contract documents are accurate and coordinated. A variety of project management firms provide peer review services.

f. Develop a risk management structure and process for the P&G Project. Establish 3 to 4 teams, focussing on construction, equipment, systems and infection control. Each

team will identify potential operational and financial risks and their impact. The goal is proactive risk management to minimize cost and time delays. The risk management structure should be in place for the duration of the P&G Project. There are a variety of existing risk management tools that may be adopted for this purpose.

g. Consider delaying all non-Phase 1 capital projects, including research, until the Sunnybrook and Women's Foundation has gained sufficient momentum in fundraising for Phase 1 projects.

h. Create a Network of Excellence for Toronto P&G services, building on the vision articulated by Mount Sinai Hospital and the Child Health Network. The Network should incorporate the two tertiary perinatal centres, the Hospital for Sick Children and Level II perinatal centres. Strong collaboration between the members of the Network could achieve further excellence in patient care, education and research.

i. Consider the need to redevelop Mount Sinai Hospital's existing perinatal service. Mount Sinai Hospital's existing perinatal program requires extensive renovation to meet current standards.

j. Pursue development of the Women's Health Institute at the 76 Grenville site. Continue planning for the WHI, collaborating with other women's health experts and stakeholders. Consider new and creative operating models. The Institute should bring together women's health expertise from across the City of Toronto and act as a provincial, or even national, centre for excellence in women's health.

k. Explore an Alternate Funding Plan (AFP) for physician remuneration. An AFP would further strengthen the academic Program by allowing physicians to focus on higher acuity patients and protect time for teaching and research.

l. Explore ways to work within Bill 51 to improve accountability and efficiency.

11. Appendices

Appendix A

Sunnybrook and Women's College Health Sciences Centre
Perinatology and Gynaecology Focused Review Team

Dr. Jack Kitts, Lead Reviewer
President and CEO, The Ottawa Hospital

Dr. Carl Nimrod, Chair, Department of Obstetrics and Gynaecology, The University of Ottawa Head, Department of Obstetrics, Gynaecology and Newborn Care, The Ottawa Hospital

Dr. Doug McMillan, Professor of Pediatrics, Dalhousie University
Head, Division of Neonatal Pediatrics, IWK Health Centre and Dalhousie University

Ms. Ellen Rosen, Vice President, Children and Women Clinical Business Unit, London Health Sciences Centre

Mr. Gino Picciano, Senior Vice President and Chief Operating Officer, The Ottawa Hospital

Support to Review:

Ms. Lucy Brun, Agnew Peckham, Functional Programming Consultant
Ms. Linn Marshall, Marshall & Murray, Cost Consultant
Ms. Mary Boutette, Executive Assistant to Chief Operation Officer, The Ottawa Hospital

Communications:

Peggy Taillon, VP Advocacy, Community Engagement & Chief Privacy Officer, The Ottawa Hospital

Appendix B

Ministry of Health and Long-Term Care

TERMS OF REFERENCE
Sunnybrook and Women's College Health Sciences Centre
Perinatal and Gynecology Program Focused Review
January 2005

Overview of the Project

Sunnybrook and Women's College Health Sciences Centre (S&WCHSC) is proposing a capital redevelopment project at its Bayview campus that exceeds $300M in total project costs and requires up to $100M in debt financing to support the local share to meet Health Services Restructuring Commission (HSRC) directions. At the conclusion of the project the Perinatal and Gynecology (P&G) program from the Grenville Street site (former Women's College Hospital) and the programs and services from the Wellesley Street site (former Orthopaedic and Arthritic Hospital) will transfer to the Bayview Campus (former Sunnybrook Health Sciences Centre).

The Ministry of Health and Long-Term Care (MOHLTC) is concerned regarding the affordability of this project and has advised that the Wellesley Street site should remain in operation in the foreseeable future. Therefore, the MOHLTC is seeking a focused review of the HSRC directions as they pertain to the siting and management of the Perinatal and Gynecology (P&G) component of the project to determine if the proposed redevelopment solution is the most efficient and effective long-term capital and operating solution for delivery of this program.

NOTE: Inclusion in this document of reference to the Wellesley Street site (former Orthopaedic and Arthritic Hospital) remaining open in the foreseeable future creates public awareness of an issue that has been confidential to date.

Principles of the Review

The proposed solution should:

- Be consistent with the ministry's transformation agenda, which emphasizes patient focused care, integration and achievement of results against 8 key parameters, which are:
- reduced wait times for important procedures,
- improved access to family physicians and other members of the primary health care team through the creation of 150 Family Health Teams,
- enhanced long-term care and home care,
- accessible community-based mental health,
- a revitalized public health system,
- a comprehensive child vaccination program,
- reduced rates or tobacco use and childhood obesity, and
- a health care system that lives within its means.
- Optimize local affordability and financial viability of the corporation and the government
- Optimize service delivery for regional and provincial level III Neonatal Intensive Care Units (NICU) and High-risk Obstetrical programs.
- Maintain consistency with National, Provincial and Greater Toronto Area (GTA) Child Health Network guidelines/standards as they pertain to the role of a tertiary care centre for maternal/newborn services.
- Ensure clinical coherence with other programs and services required to maintain Level III NICU and high-risk obstetrical care

- Expedite the resolution of safety/quality issues at the current site of the P&G program
- Provide a physical solution that accommodates program needs
- Optimize clinical, operational and quality outcomes of the P&G program
- Assume that the Wellesley Street site will remain in operation in the foreseeable future
- Assume that the scope and volumes of the P&G program are as per the ministry approved Functional Program
- Consider implications on:
  - Bill 51 "the Sunnybrook and Women's College Health Sciences Centre Act"
  - S&WCHSC clinical priorities, mission and vision
  - The education and research mandates of the corporation and the regional and provincial level III Neonatal Intensive Care Units and High-risk Obstetrical programs.
  - Recruitment and retention of medical, technical and professional staff
  - Future demand for P&G services in the Toronto region
  - Feasibility of proposed options and acceptance by the system partners.

Scope of the Review

The project is expected to result in an objective review of:

- The long-term capital and operating costs (20 year outlook) of maintaining aging infrastructure and operations of the P&G program at the Grenville site;
- versus transferring the P&G program to the Bayview Campus as per the approved and proposed M-wing redevelopment project;
- versus alternative redevelopment solutions for the program on alternative sites;
- versus potential for integration/collaboration with other P&G programs at other institutions; and
- The capital and operating impacts on the options of the Wellesley Street site remaining in operation in the foreseeable future.

- The review can build on the Operational Review undertaken by HayGroup Consultants throughout 2001, specifically this group's knowledge of costs to maintain multiple sites of an organization.

- The review can build on any previous information/reviews relevant to S&WCHSC's Perinatal and Gynaecology program.

- The external consultation involved in the review is limited to the following:
  - Dean of the Obstetrics Program at the University of Toronto;
  - Experts at Criticall, Child Health Network and the 2 other Level III providers in the region, i.e. the Hospital for Sick Children and Mt. Sinai Hospital.

- The internal consultation involved in the review will include the President and Chief Executive Officer, Chair of the Board of S&WHSC, Chair of the Board of Women's College, Chief of Staff, and other clinical and management leaders of S&WCHSC as required.

Deliverable

The MOHLTC is requesting an executive summary and written report that concludes with a recommendation for siting and management of the S&WCHSC P&G program having consideration for the stated principals.

Specifically the report will:

- Summarize the documentation reviewed;
- Summarize the consultation undertaken;

- Present the detailed analysis of the options considered including pros and cons, impacts, estimated capital and operating costs and assumptions / methodology underlying the costs presented;
- Summarize the analysis and identify the criteria, in addition to the principles, used to select the recommended option.

Timeframe

A draft final written report will be submitted 8 weeks after work has commenced.

Potential Review Team

The ministry is proposing a review team that brings together the following areas of expertise:

Reviewer #1:
This reviewer will act as Chair of the review team and should be an expert administrative leader/executive officer with knowledge of health care capital redevelopment and/or knowledge of leadership/mandate of Academic Health Sciences Centres.

Reviewer #2:
This reviewer will be chosen based on input from reviewer #1 and will provide clinical knowledge of Perinatal and Gynecology program delivery in a comparable community.

Reviewer #3:
This/these reviewer(s) will also be chosen based on input from reviewer #1 and will provide technical knowledge i.e. architectural/engineering expertise in projects of a comparable size.

Suggested review team members include:

Reviewer #1/Chair of the Review Team:
Dr. Jack Kitts, CEO, The Ottawa Hospital

Reviewer #2:
The ministry is suggesting a national clinical leader in Obstetrics i.e. Chair/ex-Chair of an Obstetrical Faculty at a university (suggested names appended).

Reviewer #3:
A team of technical expertise could be assembled by reviewer #1 or provided through consultation firms.

In addition to the review team, additional advice/support i.e. technical or legal may be required subject to the discretion of the review team.

Background

Summary of Health Services Restructuring Commission (HSRC) Directions

- Consolidate programs and services of the Sunnybrook Health Sciences Centre (Bayview Avenue), Women's College Hospital (Grenville Street) and the Orthopaedic and Arthritic Hospital (Wellesley Street) to Bayview Avenue;
- Renovate the Women's College site to accommodate women's ambulatory care programs (including the sexual assault treatment centre) from the former Women's College Hospital that do not require the support of inpatient services;
- Decommission and dispose of the land and buildings not required for ambulatory care services at the Women's College site;

- Close the Orthopaedic and Arthritic Hospital site, including the decommissioning and disposal of the land and buildings.

Since the HSRC Directions

Governance:

- Subsequent to the HSRC directions, the Sunnybrook and Women's College Health Sciences Centre was created by an Act of the Legislature in 1998.

- In accordance with the S&WCHSC Act, S&WCHSC has contracted with the Women's College Hospital to manage the Women's College Ambulatory Care Centre (WCACC) and all of the programs and services sited there. There continues to be a Women's College Hospital Board of Directors linked to the Sunnybrook & Women's College Health Sciences Centre Board.

Capital:

- The HSRC also directed the amalgamated corporation to undertake a capital construction project consisting of new construction and renovations to the Bayview Campus and renovations to the Grenville site with a maximum total project cost of $74.6 million. An additional $8.6 million was identified for furnishings and equipment.

- The corporation has proposed a three-phase redevelopment project. At the conclusion of phase 1, the Perinatal and Gynecology program will transfer from Grenville Street to the Bayview Avenue (2008). At the conclusion of Phase 2, the Wellesley Street site will transfer to the Bayview Avenue site and the Wellesley Street site will close (2011). Phase 3 is the development of the Grenville Street site into an Ambulatory Care Centre including the Women's Health Institute (WHI). It is in the early planning stages.

- In May 2000, the ministry approved a maximum ministry grant of up to $40.4 M towards total project cost estimates of $68.9M towards phase 1 redevelopment of the Bayview Campus. In September 2003, the ministry increased the grant for phase 1 to a maximum of $130.7M towards total project cost estimates of $207.9M. The current estimate for this phase is $228M ($20M in increases associated with containment of infectious diseases and inflation). The phase 2 project is not approved but has an estimated total project cost of $103.7M. The ministry has approved a planning and design grant of $11.5M for phase 3. This grant includes the strategic planning costs for the WHI.

- The Sunnybrook & Women's College Foundation has committed to providing $138M for phases 1 and 2 from the capital campaign proceeds.

- In addition to the above commitment, the ministry has provided a grant of up to $2.4M towards total project costs of $3.4M to establish the Ross Tilley Burn Centre at the Bayview Campus, which is a transfer of the burn program from the former Wellesley Central Hospital as directed by the HSRC. This unit opened in 1998.

- At the conclusion of phase 1, the Bayview Avenue site would provide:
  - services for 4250 births in 68 beds and 48 NICU beds, an increase of approximately 400 high-risk births;
  - enhanced mental health and dialysis services;
  - care for 17, 100 additional emergency patients.

- The conversion of the Grenville Street site to an Ambulatory Care Centre (WCACC) is being phased-in. Since April 1st, 2001 the former Women's College Hospital emergency department has been converted to a 24-hour, 7 days/week ambulatory clinic for scheduled and unscheduled visits. Most recently, the ambulatory centre reduced its overnight hours to limit access to only obstetrics and

gynaecology patients and those visiting the Sexual Assault and Domestic Violence Care Centre (between 10 p.m. and 7 a.m.), all other patients are re-directed to other emergency departments. Ambulances have ceased to bring unscheduled medical/surgical patients to the site. The reorganization of services at WCACC includes the transfer of 15 medical beds to the Bayview Avenue site and the conversion of 18 medical beds to a medical day unit at the Women's College Site.

- S&WCHSC is seeking Ministry approval to release the initial tender package associated with the construction of the first phase of their proposed 3 phase development project.

- The ministry is concerned regarding the magnitude of debt financing proposed by the hospital. The hospital is seeking up to $100M in short-term bridge and long-term financing for the local share of phases 1 and 2. The financing would be viewed as a general obligation of the hospital. The hospital Foundation is committed to fund raising for the local share over a 10-year period to pay back the debt. However if the Foundation cannot raise the funds, the debt would be serviced through general operating funding of the hospital.

- In addition to affordability concerns, the hospital:
  - is proposing alternatives for redevelopment of the Wellesley Street site as a Centre of Excellence for Hips and Knees;
  - has presented the ministry with a new Master Plan that shows significant additional future development on the Bayview Avenue site including an N wing with an estimated total project cost of $25M for laboratory redevelopment.

Operating:

- In June 2001, the Ministry and S&WCHSC mutually agreed to proceed with a full operational review of the hospital by external consultants. The external consultants (the Hay Group) submitted a draft final report to the ministry in July 2002.

- The overall objective of the review was to develop a plan to make strategic, operational, management and governance improvements to ensure long term success and achieve a positive financial position.

- One key outcome of the review was the hospital Board approved the development of a multi-year recovery plan ("management plan") and provided support for a capital redevelopment plan that is congruent with the directives of the Health Services Restructuring Commission (HSRC).

- The operational review confirmed the need to focus the hospital's capital redevelopment priorities on meeting the HSRC directives in a timely and cost effective manner. It was recommended that the immediate priority of the capital development project should be the transfer of the Perinatal and Gynaecology program from the Women's College site to the Bayview Campus because of the growing issues of quality and safety of patient care.

- The recovery plan implementation is complete with the exception of $4M associated with the Grenville Street site.

- In 2002/03, the Ministry provided the hospital with $55 million in additional base funding to address operating pressures. In February 2004, the hospital received an additional $10.4M to address financial pressures.

- The Ministry adjusted 2003/04 operating surplus is $3.5M or 0.8% of the Ministry base allocation. The forecasted working capital deficit for 2003/04 is $74.6M or 17.8% of the base allocation.

- For 2004/05, the hospital is forecasting a $23.2Moperating deficit. In order to balance the budget for 2004/05, the hospital is considering staff lay-offs, and reducing in-patient volumes.

Appendix C

Documentation Reviewed
Sunnybrook and Women's College Health Science Centre
Perinatology and Gynaecology Review

Final Terms of Reference for the Review..... Tab 1

Review Work plan, February 10th, 2004.....Tab 2

SWCHSC Capital Project: Update for Minister's Office, August 19th, 2004..... Tab 3

External Medical Review of the Sunnybrook & Women's Perinatology and Gynaecology Program, Dr R. Liston, June 2004..... Tab 4

External Nursing and Administration Review of the Sunnybrook & Women's Perinatology and Gynaecology Program, J. Rush, July 2004..... Tab 5

Sunnybrook and Women's College Health Sciences Centre Master Plan..... Tab 6

Capital Financing Plan..... Tab 7

Financing / Foundation Plan (Ketchum)..... Tab 8

Perinatology and Gynaecology Program, Head Start Proposal..... Tab 9

SWCHSC Perinatology and Gynecology Comparative Site Analysis, Agenw Peckham, September 20th, 2004..... Tab 10

SWCHSC, Perinatology and Gynecology Functional Program, Agnew Peckham, April 1999 and March 2003..... Tab 11

Report of the Internal Review Committee of the Child Health Network for the Greater Toronto Area, 2004..... Tab 12

Obstetrical Bed Capacity in the GTA: Trends, 1996 to 2003. CHN-GTA, Briefing by The Andrews Group, September 12th 2003..... Tab 13

Discussion Draft: Needs and Trends, SWCHSC Obstetrics (Birthing Services) and Gynecology Reviews, The Andrews Group, June 2004..... Tab 14

Discussion Draft: Comparing S&W with National and Regional Maternal Care Guidelines and Standards, The Andrews Group for WCH Campus, 2004..... Tab 15

Guidelines for the Clinical Scope of Maternal and Newborn Services, Child Health Network for the Greater Toronto Area, March 2001..... Tab 16
Family-Centred Maternity and Newborn Care National Guidelines, Health Canada, 2000..... Tab 17
Chapter 1: Introduction and Philosophy
Chapter 2: Organization of Services
Chapter 10: Facilities and Equipment

SWCHSC Safety and Sustainability Issues..... Tab 18

Bill 51, Sunnybrook and Women's College Health Sciences Centre Act, 1998.. Tab 19

SWCHSC Hospital Business Planning Brief, 2004-2005..... Tab 20

Background SWCHSC Information..... Tab 21

Related Correspondence..... Tab 22

Related Press Clippings..... Tab 23

Niday Perinatal Database 2004 Statistics for SWCHSC and Mt. Sinai Hospital . Tab 24

SWCHSC P&G Risk and Performance Data including: HIROC Perinatal Claims 1999-2004, Anaesthesia Quality Control Data 2002-2005, Oxford Vermont Key Performance Measures 2003, Caesarean Hysterectomy Rates 2001-2004 ..... Tab 25

Ontario Criticall Program Perinatology Data 2001-2004 ..... Tab 26

Niday Perinatal Database for the Greater Toronto Area, First Annual Statistical Report 2003-2004, Child Health Network, December 2004 ..... Tab 27

Proposal to the Child Health Network for Perinatal and Paediatric Regional Programs at North York General Hospital and Credit Valley Hospital, North York General Hospital and Credit Valley Hospital, December 2004..... Tab 28

SWCHSC Organizational Charts and Reporting Structures, February 2005..... Tab 29

SWCHSC Labour and Delivery Committee Terms of Reference ..... Tab 30

Report of Review of Dr. Mary Hannah, Maternal, Infant and Reproductive Health Research Unit, The Centre for Research in Women's Health, April 2002 ..... Tab 31

Women's Health Institute: Making a Difference for Women, Draft Case for Support, January 2005 ..... Tab 32

Costs Associated with Maintaining P&G at the Women's College Ambulatory Care Centre Site, SWCHSC, February 2005 ..... Tab 33

SWCHSC Capital Planning References ..... Tab 34

a. Master Plan Volumes 1-4, Phase 1 SB1 & 2
b. Volume A – P&G Planning Approval Chronology – 1999-2004
c. Volume B S&W Ministry Meetings – 2002-2004
d. Volume C – S&W Submissions to the MoHLTC – 2003-2004
e. Volume D – Capital Financing Plan – 2003-2004
f. Volume E – M-Wing Vertical Shell Expansion – Correspondence, Submissions and Meetings
g. Volume F – Impact of SARS on Phase 1 Capital Redevelopment - 2003

Additional MoHTLC Documents ..... Tab 35

a. Information on Containment of Infectious Diseases in the ED
b. Correspondence Between MoHLTC and Hospital Regarding Proposed N-Wing Research Facility Project
c. MoHLTC Requirements for Local Share Plans for hospital Capital Redevelopment, February 2005
d. HIRF Funding and Related Projects
e. Modified Phase 1 Project List and Approval Status
f. Funding History Around the IRCCI Space on Existing Floor 3 of M-Wing

Harris et. al., Single Room Maternity Care: Perinatal Outcomes, Economic Costs and Physician Preferences. Journal of Obstetric Gynaecology Canada. 2003; 26(7): 633-40. ..... Tab 36

Mount Sinai Hospital. Proposal to Establish a Perinatal Network of Excellence, March 10th, 2005..... Tab 37

Appendix D

Review Itinerary

Perinatal and Gynaecology Clinical Review
Final Schedule

Thursday, February 24th, 2005			
Time	**Review Team**	**Representatives**	**Location**
0700 - 0730	Dr. J. Kitts Dr. C. Nimrod Dr. D. McMillan Ms. E. Rosen Mr. G. Picciano Ms. M. Boutette	Breakfast	Grenville site, Room 541
0730 - 0830	All	CEO SWCHSC - Mr. Leo Steven CEO Women's College Campus - Ms. Nancy Malcolm, EVP Medical & Academic Affairs/ Chief Medical Executive - Dr. Bob Lester	Grenville site, Room 541
0830 – 0900	All	Board Chair (SWCHSC) - Ms. Virginia McLaughlin	Grenville site, Room 541
0900 - 0930	All	Board Chair (WCH) - Ms. Carol Cowan	Grenville site, Room 541
0930 - 1000	All	Chief Obs/Gyn - Dr. Jennifer Blake	Grenville site, Room 541
1000 - 1030	All	P&G Program Chief - Dr. Andrew Shennan	Grenville site, Room 541
1030 - 1100	All	Director, Centre for Research in Women's Health - Dr. Heather Maclean Vice President Education - Dr. Peeter Poldre	Grenville site, Room 541
1100 - 1130	All	Chief of Newborn & Developmental Paediatrics - Dr. Michael Dunn	Grenville site, Room 541

Thursday, February 24th, 2005			
1130 - 1230	All	Tour of Women's College Campus – Ms. Nancy Malcolm and Team	Grenville site
1230 - 1330	All	Lunch	Grenville site, Room 541
1330 - 1400	All	Chief of Family & Community Medicine - Dr. Jim Ruderman, Midwifery Head - Ms. Joyce Coombs	Grenville site, Room 541
1400 - 1430	All	Key site Medical Leaders (Anesthesia, Diagnostic Imaging, Laboratory, Medical Advisory Committee, General Practice) Dr. Jean Kronberg Dr. Jennifer Blake Dr. Phyllis Glanc Laboratory Medicine	Grenville site, Room 541
1430 - 1530	All	Joint meeting with P&G Physicians, including: Obstetrics, Gynaecology, Maternal Fetal Medicine, Neonatalogy, Anaesthesia, Family Medicine, Internal Medicine	Grenville site (WC 2nd Floor Board Room)
1530 - 1600	All	Travel to Bayview Campus	
1600 - 1700	All	Tour of Bayview Campus - Mr. Leo Steven and Team	Bayview site Meet in C103
1700 - 1730	All	Key site Medical Leaders (Anesthesia, Diagnostic Imaging, Laboratory, Medical Advisory Committee, General Practice) Dr. Alan Moody Dr. Andy Smith Dr. Bill Sibbald Dr. Marciano Reis Dr. Jennifer Blake Dr. Andrew Simor	Bayview site Room C103

Thursday, February 24th, 2005			
1730 - 1800	All	Debrief	Bayview site, Room C103

Friday, February 25th, 2005			
Time	**Review Team**	**Representatives**	**Location**
0730 - 0800	All	Vice President Research - Dr. Michael Julius	Grenville site Room 541
0800 - 0830	All	EVP Programs / Chief Health Professions & Nursing Executive - Ms. Sue VanDeVelde-Coke	Grenville site Room 541
0830 - 0930	All	Nursing and Professional Leaders Director Obstetrics - Ms. Jo MacDonell Director NICU - Ms. Denise Zayack Director Health Professionals - Ms. Heather McPherson	Grenville site Room 541
0930 - 0945	All	Travel to Mt. Sinai	
0945 - 1145	All	Mt. Sinai Hospital – Dr. Keith Tanswell, Paediatrician-in-Chief – Ms. Tracy Kitch, PDN-Womens & Infants Health, Nursing Department – Dr. Allison McGeer, Director, Infection Control – Dr. Kin Fan Young Tai, Staff Neonatologist/Director of Nurseries – Dr. Alan Bocking Obstetrician & Gynaecologist-in-Chief (10:30 – 11:30)	Mt. Sinai Executive Conference Room 335a
1130 - 1230	All	Tour of Mt. Sinai	Mt. Sinai
1230 - 1300	All	Travel to Ministry Offices	
1300 - 1400	All	Lunch with Ministry Staff Ms. Elizabeth Woodbury and Mr. Archie Outar (for Ms. Marnie	Ministry Offices – 55 St. Clair Ave. West

		Webber), Mr. David Stolte, Mr. Bill Bailey, Ms. Meryl Hodnett	
1400 - 1500	All	Break	Ministry Offices – 55 St. Clair Ave. West
1500 - 1530	All	Criticall Program Director - Ms. S. Moneta Perinatal Medical Director - Dr. A. Shennan	Ministry Offices – 55 St. Clair Ave. West
1530 - 1630	All	Children's Health Network Current Board Chair - Mr. W. Fyffe, Past Board Chair - Ms. S. Jarvis, Executive Director - Ms. A. Quigley Medical Advisor - Dr. Jonathan Tolkin	Ministry Offices – 55 St. Clair Ave. West
1630 - 1730	All	Debrief	Ministry Offices – 55 St. Clair Ave. West

Perinatal and Gynaecology Capital Review
Final Schedule

Wednesday, March 2nd, 2005			
Time	**Review Team**	**Representatives / Activity**	**Location**
0800 - 1030	Mr. G. Picciano Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	Debrief about clinical review and finalize capital review approach	Bayview site Room C130
1100 - 1200	Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	Tour of Bayview Campus - CEO SWCHSC - Mr. Leo Steven, EVP Programs / Chief Health Professions and Nursing Executive – Ms. Sue Coke, EVP Corporate – Mr. Michael Young, VP Corporate Strategy & Development – Mr. Sam	Bayview site Meet in C104 (Leo Steven's Office)

Wednesday, March 2nd, 2005			
		Marafioti, Director, Capital Planning & Development - Mr. Peter Green, Director, Clinical Planning & Commissioning - Nina Lowe	
1200 - 1230	Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	Lunch	Bayview site Room C130
1230-1300		Travel to WC	
1300 - 1400	Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	Tour of Women's College Campus CEO Women's College Campus - Ms. Nancy Malcolm, Director, NICU – Ms. Denise Zayack, Chief of Newborn and Developmental Pediatrics - Dr. Michael Dunn, Manager, Site Coordination, WCACC – Ms. Dawn Masters, Ms. Nina Lowe Mr. Peter Green Project Manager, Corporate Planning & Development - Mr. Barry Haynes	Grenville site Meet in Room 541
1400 - 1700	Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	Documentation Review and Analysis	Grenville site, Room 541

Thursday March 3rd, 2005			
Time	**Review Team**	**Representatives / Activity**	**Location**
0900 - 0930	Mr. G. Picciano Ms. L. Brun Ms. L. Marshall Ms. M. Boutette	Debrief about First Day of Capital Review	MoHLTC Offices, 55 St. Clair Ave. W.

Thursday March 3rd, 2005			
0930-1100	Mr. G. Picciano Ms. M. Boutette Ms. L. Brun Ms. L. Marshall	MoHLTC Capital Branch MoHLTC, Toronto Region MoHLTC HRIT Ms. Judy Switson Ms. Meryl Hodnett Ms. Elizabeth Woodbury Mr. Archie Outar Mr. Bill Bailey Mr. David Stolte Mr. Geoff Murray Mr. Michael Parzei	55 St. Clair Ave. W.
1100-1130		Travel to Bayview Campus	
1130 - 1230		Vice President, Corporate Strategy and Capital Redevelopment, Chief Information Officer - Mr. Sam Marafioti	Bayview site Room C103
1230 - 1330	All	Lunch	Bayview site Room C103
1330 - 1730	Dr. J. Kitts and All	SWCHSC, Planning Team Mr. Leo Steven Mr. Peter Green Ms. Nina Lowe Mr. Sam Marafioti Mr. Barry Haynes Planning Manager Redevelopment - Ms. Eileen MacIsaac, Current SWCHSC Consultants – H.H. Angus (Mr. Steve Smith/Mr. Peter Gordon) – G&G Architects (Mr. Girish Ghatalia/ Mr. Mauro Di Carlo/ Mr. Vlad Pavliuc) – Hanscomb (Ms. Susan Neil) – Parkin Architects (Ms. Lynn Wilson-Orr) – Project Control (Mr. John Wieser)	Bayview site Room C103

Friday, March 4th, 2005			
Time	**Review Team**	**Representatives / Activity**	**Location**
0730-0800	Dr. J. Kitts Mr. G. Picciano Ms. M. Boutette Dr. C. Nimrod	CEO, The Hospital for Sick Children - Ms. M.J. Haddad,	Grenville site, Room 541
0800 - 0900	All	SWCHSC, Executive Vice President Corporate Services – Mr. Michael Young, Acting Chief Financial Officer – Ms. Alison Welch, Director Decision Support – Ms. Kamini Milnes	Grenville site, Room 541
0900 - 1000	All	SWCHSC Foundation Board Chair - Mr. Terry O'Sullivan, Campaign Chair - Mr. George Fierheller, CEO - Mr. Kevin Goldthorp,	Grenville site, Room 541
1000 - 1030	Dr. J. Kitts Mr. G. Picciano Ms. M. Boutette	Friends of Women's College Dr. Beverley Richardson, Ms. Jocelyn Palm Ms. Joan Hill	Grenville site, Room 541
1030 - 1100		S&W Chief of Anaesthesia - Dr. Gil Faclier	Grenville site, Room 541
1100 - 1200	Dr. J. Kitts Mr. G. Picciano Ms. M. Boutette Dr. C. Nimrod	Dean, Faculty of Medicine U of T - Dr. David Naylor By teleconference	Grenville site, Room 541
1200 - 1300	All	Lunch/Debrief Mr. Leo Steven Ms. Nancy Malcolm Mr. Sam Marafioti	Grenville site, Room 541
1300 - 1315		Travel to Mt. Sinai	
1315 - 1415	All	CEO Mt. Sinai - Mr. Joseph Mapa	Room 335a

Perinatal and Gynaecology Review
Additional Meetings

Review Team	Representatives / Activity
Dr. D. McMillan, Dr. C. Nimrod	Telephone and email communication with various medical experts to discuss best practice for: • Consolidation of perinatal services • Appropriate number of beds • Appropriate volume of births
Dr. J. Kitts, Mr. G. Picciano	Telephone interview with Deputy Minister of Health and Long-Term Care - Mr. R. Sapsford
Dr. J. Kitts, Mr. G. Picciano	Meeting with Head of SWCHSC Operational Review – Mr. M. Rochon, to discuss alignment between the two reviews

Appendix E

Capital / Technical Review Issues and Questions

CAPITAL / TECHNICAL REVIEW
ISSUES AND QUESTIONS

Context

Preliminary directions from the clinical review support an expedited move of the Perinatal Program from the Women's College site to the Bayview site. However, the reviewers had concerns about the details of the functional program and floor plans. The design is innovative, but costly.

SWCHSC is proposing to shell in 4 floors of space on the top of the existing M-wing at the Bayview site. The original Perinatal Program plan would use 2 ½ floors of this new space. The remaining 1 and ½ floors were to be used for relocation of the Orthopaedic and Arthritic Institute. It appears that OAI will be remaining at its downtown location for the foreseeable future. SWCHSC is proposing to proceed with the full 4 floors to build "future capacity". Given the cost of construction this may not be an option. Instead, reviewers may need to consider construction that would allow for future vertical development if necessary.

The reviewers must look for opportunities to reduce the size of the Perinatal Program footprint while maintaining the Program's scope. Ideally the Perinatal Program would fit on 2 floors above the existing M-wing.

Potential opportunities to be explored include:

a) **Ambulatory Clinics** – The P &G half of the sixth floor is dominated by ambulatory clinic activity (e.g. 30 exam rooms and 5 pairs of reception/waiting rooms). As a benchmark, TOH's General Campus OB/Gyn Department has 9 ambulatory rooms to accommodate all of Maternal-Fetal Medicine, Colposcopy and some General Ob/Gyn.

b) **LDRPs** - In L&D there is appears to be a high number of Labour & Delivery Recovery Post Partum Rooms. Twenty LDRPs are planned, each 360 sq feet and each (I think) with a Jacuzzi. For 1/3 of patients (having caesarean sections) LDRP is inappropriate. Will the c-section rate stabilize? If so, what is the predicted rate and its impact on the need for LDRPs. LDRPs are also inappropriate for the significant proportion of high-risk patients that have vaginal deliveries. There may be a model in the literature to devise a formula to address this.

c) **Antenatal and Postpartum Beds** - The number of beds appears high given the volume of births. 22 antenatal and ____ (to be clarified) postpartum beds exist in the current plan. For the 3800 births at TOH's General Campus there are 13 LDR beds, 30 combined antepartum and postnatal beds and 6 flex beds. We believe that the antenatal

home care (10 beds) for the 8000 births and the independent self care (4 beds) adequately meet our needs. S&W should explore the development of a home antepartum program.

d) **GYN Beds** – The reviewers could not find Gyn beds in the current plan. Gyn Oncology may already be in the surgical or cancer program at Sunnybrook. Currently WCH has 20 GYN beds. TOH has 10 gynaecologic oncology beds and 8 gyn beds at the General Campus. This is more than enough to service this size of program.

e) **Neonatal follow-up** - Neonatal follow-up may be done off-site or elsewhere (Bloorview MacMillan?). 2730 sq feet is allocated in the current plan.

f) **Physicians' Offices** - Physicians' offices are either 18 or 24 sq feet with a same size office for each doctor's secretary (18 or 24). Six of the twenty-four offices in the plan were unassigned. In most units, 2 doctors share 1 secretary. Offices are present for the Vice-President and secretary in this space as well.

g) **Meeting Rooms and Class Rooms** - The number and size of meeting and classrooms on floor # 5 appears excessive. Six are listed and include 2 libraries. Potentially move the library, database and record space. Is archive space still required?

h) **MIRU** - The Maternal Infant Reproduction research unit could be housed elsewhere if space is an issue.

i) **Urogynecology** – Urogynecology could potentially be located elsewhere in association with the rest of gynaecology.

j) **Radiology Viewing Room** – What is the plan for PACS? A radiology viewing room should not be necessary with digitized images coming directly into the clinical areas.

k) **NICU** - In the NICU design, a private family room is located behind each bed. While the design is family centric, it is also costly. It is also unclear that these rooms would be fully utilized. The clinical reviewer from Halifax indicated in his experience similar rooms were not used to capacity.

l) **Other** - A few smaller offices / parts of the program could be accommodated elsewhere: e.g. the gift shop (300 sq ft), breast feeding room (551 sq ft), etc., offices for psychiatry and the foundation on the sixth floor.

Outstanding Items / Questions for the
SWCHSC FOCUSED REVIEW

In addition to the questions / issues forwarded to Nancy Malcolm on March 7th, please find attached a list of outstanding items to be addressed by the SWCHSC team as part of the P&G Focused Review:

1. **Floor Plan Redesign** - The SWCHSC team needs to realign current P&G sketch drawings with the functional program and MoHLTC directions.
    a. The P&G program should be accommodated on two floors of the M-wing;
    b. The methodology for determining grossing requirements was unclear. Please clearly delineate how SWCHSC moved from NSF to DGSF to BGSF. Please provide DGSF by component.
    c. Please provide details on the additional space indicated on the sketch drawings against the functional program. Please examine the additional space, determine if it is required, and identify alternative locations;
    d. Please explore the feasibility of, and identify space savings associated with, a modular clinic model;
    e. In the Canadian context, please provide the rationale and evidence supporting the proposed infection control measures, including single rooms;
    f. Extending the atrium to subsequent floors generates space inefficiencies and is inconsistent with current MoHLTC guidelines. Please provide options for not extending the atrium and associated cost implications, supported by structural engineering reports;
    g. Please provide the estimated time frame from re-design to completion of tender ready documents.

2. **Central Utilities Plant** – Please provide a full breakdown of the CUP for the P&G, Emergency Department and Research projects. In addition, the SWCHSC team indicated a satellite CUP located closer to the M-wing was not cost effective. Please provide the analysis and documentation supporting this conclusion.

3. **Penthouse** – The SWCHSC team indicated that future construction above a two-floor addition on M-wing would be cost prohibitive due to the location of a penthouse. Please provide the analysis and documentation supporting this conclusion. In addition, please indicate the implications (on size, equipment and cost) for the penthouse if:
    a. the proposed 2 upper floors of the M-wing shell proceed, but do not house operating rooms and intensive care unit(s);
    b. SWCHSC proceeds with a two story, not 4 story, addition to the M-wing.

4. **Costing** – Please have Hanscomb provide the detail for escalation.

5. **Construction Management** – Please provide written correspondence indicating pre-construction monthly expenses for SWCHSC's construction management contractor.

Van Botz. Please indicate what services are currently provided and whether payment may be counted as a credit towards future expenditures.

6. **Cash Flow** - Please prepare a revised cash flow schedule for:
   a. a two story M-wing shell and 2 floor P&G fit out;
   b. a four story M-wing shell and 2 floor P&G fit out.

   The cash flow schedule must:
   - i) Be sequenced so that the MoHLTC share is consumed before requirement of the local share, and identify when SWCHSC expects to exhaust the MoHLTC share;
   - ii) Be reflective of funds to be raised by the foundation, assuming the capital campaign would begin May 1st, 2005 (including receipt of cash vs. pledges);
   - iii) Identify to date any projects where costs have been incurred and fully paid for (for Phase 1 projects only);
   - iv) Include the actual expected costs of equipment and furnishings;
   - v) Clearly identify that the SWCHSC Foundation is carrying the cost of debts incurred to finance the capital development;
   - vi) Confirm interest earned on Superbuild funds beyond the interest commitment to the MoHLTC;
   - vii) Confirm that $1.5M in depreciation has been reserved for the project, over the construction time period;
   - viii) Assume efficiency gains resulting from the P&G move to the Bayview site would be directed to the SWCHSC local share for the duration of the project's financing. Calculations must be supported by detailed identification of incremental expenses that would cease when the P&G program moves to the Bayview site (e.g. physician coverage, quality assurance coordinator, etc.)

7. **Previous Reviews** – Please provide the status of all recommendations from the 2004 Rush and Liston reports.

Appendix F

Comparison of Space Allocation
Approved Functional Program and Changes to Meet Recommended Design

SUNNYBROOK &WOMEN'S
Sunnybrook and Women's College Health Sciences Centre

2075 Bayview Avenue,
Toronto, ON
Canada M4N 3M5
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www.sw.ca

MEMORANDUM

To:	Sam Marafioti	Vice President, Corporate Strategy and Capital Redevelopment, Chief Information Officer
Cc:	Nancy Malcolm	CLO, WCACC
	Peter Green	Director, Capital Planning and Development
From:	Nina Lowe	Director, Clinical Planning and Commissioning

Date: March 31st, 2005
RE: P&G Peer Review
Dr. Kitts March 7th and 9th, 2005 Letters
Floor Plan Redesign and M-Wing Space

This section addresses items 1 (a), (c), (d) and (e) of the Review Team Outstanding Items list and also the potential opportunities identified by the review team in the Capital/Technical Review Issues and Questions.

The documents in this section describe the changes made to enable the P&G Program to fit on two floors in M-Wing. That reduction was achieved through the following:

- A reduction in Program size from the March 2003 Functional Program Addendum from 92,425 net square feet to 68,950 net square feet.
- Locating 9,940 net square feet of ambulatory obstetrics and gynaecology activity in existing space at the Sunnybrook Campus and Women's College Campus.
- Utilizing 3,015 net square feet on M[illegible]5 that had previously been designated for Phase 1 and Phase 2 clinical support activities.
  - The clinical support activities will be absorbed in existing departmental space at the Sunnybrook Campus.

The process and outcomes of the P&G Executives Committee's deliberations are described in the "Floor Plan Redesign and M-Wing Space" document.

Nina Lowe

SUNNYBROOK & WOMEN'S

P&G PEER REVIEW
FLOOR PLAN REDESIGN AND M-WING SPACE
MARCH 30, 2005

SUMMARY

Not withstanding the fact that the P&G Program has an approved Functional Program, in the interests of moving the process forward, under the leadership of the P&G Executive, the Review Team's suggestions were used as the basis for further analysis. The purpose of this analysis was to address the suggestions and main themes of the Peer Review team relating to Program size, scope, and location to achieve:

- An overall reduction in the size of the Functional Program Addendum.
- A Program fit on two floors in M-Wing.
- Utilization of non-M-Wing space for P&G Program components that can reasonably be located outside of M-Wing.

This has been achieved, as described further by Functional Program component. The P&G Executive members believe that the space reductions and changes in location required many compromises. However, the overall intent of the Program can still be achieved.

The documents in this section that provide the detail related to the modifications are the:

- P&G Functional Program Addendum Space Summary
- P&G Functional Addendum Space Modifications (Detail).
- Summary of Projected Rooms and Beds for 4,250 Births – Reflects Functional Program
- Summary of Projected Rooms and Beds for 4,250 Births – Reflects Clinical Practice

Also included in this section is description of the:

- Infection Prevention and Control Measures – Canadian Context.

AMBULATORY OBSTETRICS AND GYNAECOLOGY

Maternal-fetal medicine and high-risk ambulatory activities will remain in M-Wing. The ambulatory space in M-Wing will be designed in a multi-use clinic configuration. Several of the ambulatory obstetrics and gynaecology functions – urogynaecology, generalist activities and colposcopy – will be located in existing space at the Women's College Campus or the Sunnybrook Campus. There will be minor renovations required in some of these existing areas to reflect changes in activity levels. The existing space that is used at the Sunnybrook Campus will provide the appropriate adjacencies to M-Wing.

Only high risk obstetrics offices will be located in M-Wing, with the remainder at the Women's College Campus or the Sunnybrook Campus. Space modifications to the Functional Program Addendum include reductions in ambulatory secretarial and reception space as well as staff facility and staff lounge space. Where feasible, there will be an increase in shared secretarial support. There are some office nomenclature issues in the Ambulatory Obstetrics and Gynaecology section and in some of the other sections. The correct names of the office occupants will be reflected during the revised sketch plan submission.

In general, the P&G ambulatory space strategy will continue to be reviewed within the context of the S&W Corporate strategic directions related to ambulatory care.

GYNAECOLOGY

Gynaecology beds located at the Women's College Campus will be relocated to the Sunnybrook Campus. All beds will be relocated to an existing inpatient unit at the Sunnybrook Campus, and there will be no capital costs associated with this relocation.

MATERNAL AND NEWBORN CARE

S&W remains committed to the LBR/LBRP model of care. The model reflects a combination of LBRs and LBRPs. The LBRPs will be used by a portion of the low risk patients, who have had a vaginal birth - estimated to be about 26 per cent of births – not by patients requiring a longer stay in hospital or a C-section.

The C-section rate is currently 33.5 per cent. At this point in time, there are no foreseeable changes in clinical practice to indicate this rate will change. The average length of stay (ALOS) is currently 192 hours for high risk antenatal/postpartum patients and 67 hours for combined care postpartum patients. Both the C-section rate and current ALOS are higher than at the time of writing the Functional Program.

The need for additional postpartum beds to address the increase in C-section births and increase in the ALOS will be off-set by the following:

- Increase the number of low risk patients remaining in a LBRP from 21 per cent to 26 per cent. Typically, these patients will remain in hospital for 12 hours intrapartum and 36 hours postpartum, versus 15 to 18 hours intrapartum and 44 to 48 hours postpartum, thereby reducing the overall ALOS.

- Implement protocols to decrease the ALOS for the high risk antenatal/postpartum patients from 192 to 180 hours.

The opportunity to incorporate a self care antenatal model will be explored in more detail and early indications are that this can be accommodated within the two floor model, using four 1-bed high-risk bed rooms. A home ante-partum program was piloted previously and was not considered feasible at that time. The team is considering current opportunities related to home ante-partum care, particularly in light of the new supporting technologies.

In summary, the 20 LBR/LBRPs, 23 high risk antenatal/postpartum beds and 25 combined care postpartum beds (for a total of 68 places) outlined in the Functional Program Addendum will accommodate these changes in clinical practice. The number of LBR/LBRPs will accommodate the peak periods 99 per cent of the time and the number of beds will accommodate the peak periods, approximately 95 per cent of the time, which is consistent with other programs.

The summaries of Projected Rooms and Beds provide the calculations used to determine the number of rooms required based on the Functional Program Addendum and the aforementioned changes.

Complementing the combined care postpartum unit is the breast feeding room, which the team members wish to clarify is both and inpatient and an outpatient area.

A tub or shower is required in each LBRP, the space requirements are the same for a tub or accessible shower.

As with the other major program components, there is an overall reduction in Functional Program Addendum space in the Maternal and Newborn areas. This was achieved through the deletion of the whirlpool room and a reduction in size of the newborn watch areas and education/meeting room spaces.

NEONATAL INTENSIVE CARE UNIT AND NEONATAL FOLLOW-UP CLINICS

Each NICU bed space contains a small (60 sq. ft) area for family members to spend time next to their baby. The team members wish to clarify that this space is not configured as a private family room but is adjacent to the baby's bassinet within a common patient care area. The inclusion of dedicated family support areas next to the bassinets within a NICU is considered essential to support optimal family involvement in care. The space provided by this design allows only for the placement of a couple of chairs including a recliner but would not hold a bed. If an infant with complex medical problems required extra equipment, there would be flexibility within the space to accommodate it.

With respect to utilization, the parents of the majority of infants cared for in the NICU at S&W live within the greater Toronto area and develop the habit of attending their baby on a daily basis. Focus groups held with families indicated that this process would be facilitated and family members would be comfortable in staying longer if there was a spot next to their baby that was dedicated to their needs.

A number of areas were deleted including the radiology viewing area, one care-by-parent room, alcove space with the pods, and staff common space.

The possible relocation of the Neonatal Follow-up Clinic to another location was considered. While it is acknowledged that this is an ambulatory clinic that does not require the infrastructure located in the M-Wing, the team believes that it is functionally necessary to have the clinic in the close proximity to the NICU. Several physicians and staff provide clinical coverage to both the NICU and the clinic and need to be able to move easily from one to the other in the course of each day.

A Gift Shop is included in the NICU section of the Functional Program, as one of the areas shared with the birthing areas. The Capital Variance Template notes that as a Sunnybrook & Women's own funds component. The shop is an important Program feature as it provides perinatal supplies. It is also a profit centre for the volunteers.

TEACHING RESEARCH AND DATA MANAGEMENT

Research (MIRU) space was removed when the Addendum was written. MIRU will remain in its current space. The laboratory and simulator space in the teaching area have also been removed.

PROGRAM SUPPORT

The overall area has been reduced through removal of a staff lounge, a family/sibling play therapy room and research archival storage.

OTHER M-WING COMPONENTS

Other M-Wing components referred to areas that were not part of the P&G Functional Program. These have been totally removed and no longer show on the space summary. Environmental and Information Services components have been incorporated in the BGSF, which is where they were costed. There are no cost implications for the P&G Program related to the removal of this section.

ADDITIONAL SPACES

The additional spaces reflect changes that occurred since the Functional Program Addendum was written and do not have assigned numbers. The number of spaces has been reduced and reflect only those required due to:

- Changes in infection prevention and control practices.
- Implementation of the S&W decentralized food rethermalization system.

Both of these requirements relate to practice changes that have occurred since the Functional Program was written in 1998 and submitted in 1999.

For infection prevention and control the requirements are:

- ante-rooms for one operative birthing room, one combined care room, one LBR/LBRP room, and three NICU bassinet areas.
- Two additional housekeeping rooms.

To heat patients' food on the units, two rethermalization rooms are required.

Sunnybrook and Women's College Health Sciences Centre - Summary of Space

Program Areas	Net Areas: Functional Program	Reduced Space	M Wing	Relocate	Net Total	Revised M Wing Space: Net	Gross to Net	DGSF
Ambulatory Care								
- Area One	2,400	0	120	2,280	2,400			
- Area Two	3,180	160	3,020	0	3,020			
- Area Three	2,990	0	0	2,990	2,990			
- Area Four	3,335	80	2,185	1,070	3,255			
- Area Five	8,335	835	3,900	3,600	7,500			
Subtotal - Ambulatory Care	20,240	1,075	9,225	9,940	19,165	9,225	1.40	12,915
Maternal Newborn								
- Area One	11,700	90	11,610	--	11,610	11,610	1.55	17,996
- Area Two	2,660	0	2,660	--	2,660	2,660	1.55	4,123
- Area Three	13,910	520	13,390	--	13,390	13,390	1.55	20,755
- Area Four	1,360	90	1,270	--	1,270	1,270	1.40	1,778
- Area Five	1,100	680	420	--	420	420	1.40	588
- Area Six	3,290	0	3,290	--	3,290	3,290	1.30	4,277
Subtotal - Maternal Newborn	34,020	1,380	32,640	--	32,640	32,640		49,517
NICU & Follow-Up								
- NICU	17,310	1,550	15,760	--	15,760			
- Shared Areas	2,110	--	2,110	--	2,110			
- Follow-up	1,950	--	1,950	--	1,950			
Subtotal - NICU & Follow-Up	21,370	1,550	19,820	--	19,820	19,820	1.40	27,748
Obstetrical Anaesthesia	560	--	560	--	560	560	1.30	728
Teaching, Research & Data								
- Teaching	400	400	--	--	--			
- Research	3,650	3,650	--	--	--			
- Data	720	--	720	--	720			
Subtotal - Teaching, Research & Data	4,770	4,050	720	--	720	720	1.30	936
Program Support								
- Newborn and Dev. Peds	1,480	220	1,260	--	1,260			
- Allied Health	4,220	270	3,950	--	3,950			
Subtotal - Program Support	5,700	490	5,210	--	5,210	5,210	1.30	6,773
SUMMARY								
Functional Program								
- Ambulatory Care	20,240	1,075	9,225	9,940	19,165	9,225		12,915
- Maternal Newborn	34,020	1,380	32,640	--	32,640	32,640		49,517
- NICU & Follow-Up	21,370	1,550	19,820	--	19,820	19,820		27,748
- Obstetrical Anaesthesia	560	--	560	--	560	560		728
- Teaching, Research & Data	4,770	4,050	720	--	720	720		936
- Program Support	5,700	490	5,210	--	5,210	5,210		6,773
Total - Functional Program	86,660	8,545	68,175	9,940	78,115	68,175		98,617
Other M Wing Components	4,990	4,990	--	--	--	0		0
Additional Space	775	--	775	--	775	775	1.55	1,201
GRAND TOTAL	**92,425**	**13,535**	**68,950**	**9,940**	**78,890**	**68,950**	**1.45**	**99,818**

Appendix G

Review Team's Analysis of SWCHSC's Proposed Space Modifications

Review of S&W Team Proposed Space Modifications

The S&W Team reviewed the Functional Program Addendum (March 2003) and Sketch Plans (November 2003) to determine the space modifications that will result in the need for 2 floor for the P&G program rather than 2 ½ floors in M Wing. The outcome according to the S&W Team was "a reduction in Program size from the March 2003 Functional Program Addendum from 94,425 net square feet to 68,950 net square feet" implying a reduction of 25,475 NSF (i.e., 27 per cent reduction). In fact, the Functional Program Addendum will be reduced by:

- ***eliminating*** 8,545 NSF (11,602 DGSF) or 9.9 per cent reduction, from 86,660 NSF (124,135 DGSF) to 78,115 NSF (112,533 DGSF), including
  - ambulatory care (1,075 NSF)
  - maternal-newborn (1,380 NSF)
  - NICU and follow-up (1,550 NSF)
  - teaching, reach and data (4,050 NSF); however, 3,650 NSF for research was never approved, nor located in M Wing so this could be considered an overstatement
  - program support (490 NSF)
- ***relocating*** 9,940 NSF (13,915 DGSF) to other areas of the
  - Bayview Campus (6,590 NSF; 9,226 DGSF)
  - Women's College Campus (3,360 NSF; 4,690 DGSF)

The other M Wing components (4,990 NSF) which do not relate to the P&G Functional Program and the "additional space" (775 NSF; 1,201 DGSF) that were included in S&W's summary of space, were not part of the P&G Functional Program Addendum that was approved by the MOHLTC and should not be included in the comparison of space. However, the "additional space" is required and should be planned.

Other spaces which may present further opportunities for reduction, which were reflected in the sketch plans (November 2003), but not in the proposed space modifications include:

	Net Square Feet		
	Sketch Plans	Proposed Modification	Variance
Ambulatory Care			
• Maternal Fetal Medicine	1,459	3,020	1,561
• General Division	2,026	2,990	964
• Reception, Shared, Admin.	7,048	7,500	452
NICU and Follow-Up			
• NICU	14,854	17,760	2,906
Total	25,387	31,270	5,883

A potential risk for the project is that the projected gross to net ratios will not be attained during the revised Sketch Plan stage. While the proposed space modification reflects an overall gross to net ratio of 1.41, similar to the Functional Program Addendum, the Sketch Plans reflect 1.51. If there are not strict controls, the space could increase by 5,420 DGSF (i.e., variance between the Functional Program and Sketch Plan gross to net ratio). The configuration of the building may necessitate higher gross to net ratios. The S&W must be committed to achieving the program room elements within the two floors of M Wing.

In summary, the P&G program in M Wing will include 98,617 DGSF (68,175 NSF), plus 1,201 DGSF (775 NSF) of additional space. Other spaces will be provided at:

- the Bayview Campus (9,226 DGSF; 6,590 NSF)
- the Women's College Campus (4,690 DGSF; 3,350 NSF)

Appendix H

Revised Cost Estimates and Recommended Capital Approach

MARSHALL & MURRAY INCORPORATED

April 27, 2005

The Ottawa Hospital
Civic Campus, Room M001
1053 Carling Ave.
Ottawa, Ontario
K1Y 4E9

Attention: Mr. Gino Picciano, Senior VP, COO, CIO

Re: Sunnybrook & Women's College Health Sciences Centre – Perinatology & Gynaecology Focused Review – Toronto, Ontario

Dear Gino,

We have reviewed the information/documentation provided and offer the following recommendation options based upon our findings. A detailed breakdown of the costs identified below can be found on the "Review Team Recommendation Options" summary appended to this letter.

Option 1A (2 Floors of P&G Shell & Fitout – No Future Growth) ... $106,679,381

This option includes constructing two new floors on top of the existing M-Wing Building comprising of shell & fitout for P&G. Also included is a metal clad mechanical & electrical penthouse, which imposes limitations on potential future growth. This is proposed as one project and to be tender ready in Spring 2006. The expected date of P&G occupancy would be Fall 2008.

Option 1B (2 Floors of P&G Shell & Fitout – Potential Future Expansion) ... $109,120,657

This option is similar to Option 1A in that it includes constructing two new floors on top of the existing M-Wing Building comprising of shell & fitout for P&G. However, this option includes a mechanical & electrical penthouse that could be used as interstitial space to ease future growth. This is proposed as one project and to be tender ready in Spring 2006. The expected date of P&G occupancy would be Fall 2008.

Option 1C (2 Floors of P&G Shell & Fitout – Separate Tenders) ... $112,025,228

This option is similar to Option 1B except that it will be comprised of two separate tenders. Tender One would be to construct two floors of shell space that would be tender ready in Fall 2005. Tender Two would be to construct two floors of fitout that would be tender ready in Spring 2007. The expected date of P&G occupancy would be Fall 2008.

Option 2 (4 Floors of Shell and 2 Floors of P&G Fitout) ... $136,299,650

This option includes constructing four new floors on top of the existing M-Wing Building comprising of two floors of shell & fitout for P&G, and two floors of shell space for future projects. Also included is a metal clad mechanical & electrical penthouse. This is proposed as one project and to be tender ready in Spring 2006. The expected date of P&G occupancy would be Spring 2009.

Option 3 (2 Floors of P&G Shell & Fitout / 2 Additional Floors of Shell Deferred) ... $166,446,427

This option includes constructing two new floors on top of the existing M-Wing Building comprising of two floors of shell & fitout for P&G. Also included is a mechanical & electrical penthouse that would be used as interstitial space. An additional two floors of shell space would be deferred and constructed at a later date. This is proposed as two projects with Tender One (two floors of shell & fitout for P&G) being tender ready in Spring 2006. Tender Two (two floors of shell for future projects) would be tender ready in Fall 2009. The major differences between Option #3 and Option #2 are the premium costs to "go-back" and add two additional floors of shell. These premiums are inclusive of, but not exclusively for, the preparation of the existing roof for expansion, phasing and shutdowns, infection control measures, temporary services and relocation, and escalation to anticipated tender of Fall 2009. The expected date of P&G occupancy would be Fall 2008. However, there would be some disruption to P&G as the deferred shell project worked towards a completion of Spring 2011.

Option 4 (4 Floors of Shell and 2 Floors of P&G Fitout – Sequential Approach) ... $139,983,387

This option includes constructing four new floors on top of the existing M-Wing Building comprising of two floors of shell & fitout for P&G, and two floors of shell space for future projects. Also included is a metal clad mechanical & electrical penthouse. This sequential approach is proposed as two projects with Tender One (four floors of shell) being tender ready in Fall 2005. Tender Two (two floors of P&G fitout) would be tender ready in Fall 2007. The expected date of P&G occupancy would be Spring 2009.

Option 5 (4 Floors of Shell and 2 Floors of P&G Fitout – Concurrent Approach) ... $142,253,969

This option includes constructing four new floors on top of the existing M-Wing Building comprising of two floors of shell & fitout for P&G, and two floors of shell space for future projects. Also included is a metal clad mechanical & electrical penthouse. This is proposed as two projects with Tender One (four floors of shell) being tender ready in Fall 2005. Tender Two (two floors of P&G fitout), which would be issued concurrently as a modified stipulated sum contract, would be tender ready in Fall 2006. The intended purpose of this option is to move the expected date of P&G occupancy forward to Spring 2008.

Atrium

SWCHSC has provided documentation (S&W Response to Review Team Questions March 31, 2005 – Tab 5) supporting their premium cost of $300,000 to $400,000 to infill the existing Atrium in lieu of maintaining the current design.

CUP / Infrastructure Allocation

SWCHSC has provided documentation (S&W Response to Review Team Questions March 31, 2005 – Tab 7) supporting their breakdown of C.U.P. & Infrastructure costs attributable to the P&G program. The costs have been prorated as a percentage of the total project cost from the February 2004 Sketch Plan Submission. These have been reflected in the Recommendation Options described. The following was extracted from a Hanscomb letter that describes the cost breakdown provided.

"This cost breakdown provides a reasonable apportionment to the various packages but is not intended to provide a "shopping list" for decision making. Costs will differ if items are removed or repackaged, and could attract premiums for redesign, economies of scale, or premiums for the provision of future expansion or infrastructure".

Construction Periods / Occupancy Dates

The following allowances for anticipated construction periods were made for the various options. These are based on similar healthcare projects of comparable size and cost.

4 Floor of Shell ... 2 years
2 Floors of Shell ... 1-1/2 years
2 Floors of Fitout ... 1-1/2 years
4 Floors of Shell & 2 Floors of Fitout ... 3 years
2 Floors of Shell & 2 Floors of Fitout ... 2-1/2 years

Occupancy Dates are a result of the anticipated duration for the completion of construction for each option.

Option Costing

The costs included in the recommendation options are inclusive of construction costs, premium costs, construction contingencies, ancillary or soft costs, furnishings & equipment, standby charges, escalation costs and C.U.P. costs.

Recommended Option

We recommend Option 2 as the preferred solution. This option provides flexibility for further growth at the least cost. It is most suited to minimize the problems and premium costs associated with any of the deferment options.

If the main objective is providing the most cost effective method, then our default recommendation would be Option 1B. This option offers an expected date of P&G occupancy of Fall 2008 but any future growth would carry a significant cost premium.

If you have any questions or require further assistance, please do not hesitate to contact our office.

Yours truly,
MARSHALL & MURRAY INC.

pp.

Linn Marron Marshall, SRN, PQS

Total Cost of Each Option

"OPTION MATRIX-APRIL27.pdf

FILE: (NN) L1840\1\LETTER-PICCIANO-RECOMMENDATION OPTIONS-APR27-05.DOC

Quantity Surveyors and Development Consultants
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E-mail: main@marshallmurray.com

Evaluation Matrix

Criteria	Option 1a	Option 1b	Option 1c	Option 2	Option 3	Option 4	Option 5
Timely P&G Relocation	4	4	4	3	4	3	5
Cost Effectiveness	2	3	2	5	1	4	3
Affordability	5	4.5	4	3	1	2.5	2
Enhancement of Fundraising Efforts (early construction vs. additional time to fundraise)	4	4	5	4	4	5	5
Flexibility for Future Growth	1	3	3	5	4	5	5
Alignment with Other S&W Capital Development	2	3	2	5	3	3	3
Alignment with MoHLTC Capital Planning Policy	5	5	5	5	5	5	2
Total	**24**	**26.5**	**25**	**30**	**24**	**27.5**	**25**

Scale: 1-5, where 1 is the lowest value and 5 is the highest value

Options:

1a. Two floors of P&G fitout with no capacity for future M-wing expansion.
1b. Two floors of P&G fitout with limited capacity for future M-wing expansion through inclusion of interstitial space.
1c. Two floors of shell and 2 floors of P&G fitout, with interstitial space, tendered as separate projects.
2. Four floors of shell and two floors of P&G fitout, tendered as a single project.
3. Two floors of P&G fitout, with interstitial space, with 2 additional floors of shell deferred.
4. Four floors of shell and two floors of P&G fitout, tendered as separate projects.
5. Four floors of shell and two floors of P&G fitout, tendered as a modified stipulated sum project.

Conclusion: Option 2 (4-floor shell & 2 f-floor P&G fitout), tendered as a single project, best meets the capital review criteria.

Appendix I

Cost Avoidance Associated with Recommended Solution

Project Element	Sunnybrook & Women's Option 4 Floors Shell, 2.5 Floors P&G	Review Recommendation 4 Floors Shell, 2 Floors P&G
4 Floor Shell	72,557,000	72,615,672
P&G Fitout	48,118,000	41,618,271
FF&E	7,446,200	7,446,200
Escalation to Time of Tender	27,449,405	7,459,507
Sub Total Shell & Fitout	155,570,605	129,139,650
CUP Allocation for 4 Floors	7,160,000	7,160,000
CUP Escalation *	INCLUDED	INCLUDED
Sub Total CUP	7,160,000	7,160,000
Head Start Project **	3,329,020	N/A
Head Start Escalation	INCLUDED	N/A
Sub Total Head Start	3,329,020	-
Total Cost	**166,059,625**	**136,299,650**

Total cost is to anticipated tender dates. (S&W: Shell = Fall 05, P&G Fitout = Fall 07, CUP = Spring 06)
(Review: Shell and P&G Fitout = Spring 06, CUP = Spring 06)

Costs are inclusive of construction costs, premium costs, construction contingencies, ancillary or soft costs and standby charges.

** Escalation from Sketch Plan Report (Feb. 2004) to atocipated time of tender (Spring 2006)*
*** Sunnybrook & Women's Redevelopment Project Monthly Executive Status Report #2 (Sept. 2004)*

Appendix J

Revised Cash Flow Schedules

Option 2: P&G, CUP (part), Infrastructure (part)

Sunnybrook & Women's College Health Sciences Centre
Major Capital Projects - Cashflow ($Millions) **P&G, CUP(part) & Infrasructure(part)**
Traditional MOHLTC Funding with 5% Holdback until project reconciliation
Interest Rate 5.5%
Updated April 26, 2005

Sunnybrook & Women's College Health Science Centre
Capital Cashflow

Cashflow: Review Team Option 2
P&G, CUP(part) & Infrasructure(part)

		Expended	THE DESIGN, TENDER, APPROVAL AND CONSTRUCTION PERIOD																		
		to	Fiscal 2005/06				Total	Fiscal 2006/07				Total	Fiscal 2007/08				Total	Fiscal 2008/09				Total
	TOTAL	Mar 31/05	Q1	Q2	Q3	Q4	05/06	Q1	Q2	Q3	Q4	06/07	Q1	Q2	Q3	Q4	07/08	Q1	Q2	Q3	Q4	08/09
First 2.0 Floors M Wing Shell	53.5	5.4	0.0	0.1	0.1	0.1	0.3	3.5	4.0	4.0	4.6	16.1	5.1	5.4	5.4	5.5	21.4	5.5	3.5	1.3		10.3
P&G Occupant Fit Out of M Wing	43.7	0.1	1.1	1.2	1.3	1.3	4.9	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.8	2.8	8.1	8.2	8.2	8.1	32.6
P&G FFE	7.4	0.0					0.0					0.0					0.0		2.5	2.5	2.4	7.4
Central Utilities Plant (Part)	3.4	0.3		0.1		0.3	0.4	0.5	0.4	0.4	0.5	1.8	0.4	0.5			0.9					0.0
Infrastructure Requirements (Part)	0.2						0.0		0.1			0.1	0.1				0.1					0.0
Total Project Costs (3) (4) (7)	108.2	5.8	1.1	1.4	1.4	1.7	5.6	5.3	4.5	4.4	5.1	19.3	5.6	5.9	5.4	8.3	25.2	13.6	14.2	12.0	10.5	50.3
Funding Sources																						
MoHLTC Superbuild (1)	(18.9)	(1.1)	(0.9)	(0.8)	(0.9)	(0.9)	(3.5)	(2.7)	(2.8)	(2.8)	(3.1)	(11.4)	(2.9)				(2.9)					0.0
MoHLTC - New Funds (2)	(52.9)	(3.1)					0.0					0.0	(0.6)	(3.7)	(3.5)	(5.2)	(13.0)	(8.6)	(9.1)	(7.6)	(6.8)	(32.1)
Hospital Capital Equipment Budget (5)	(5.2)	0.0					0.0					0.0				(1.3)	(1.3)				(1.3)	(1.3)
Operational Efficiency Savings After Relocation (6	(7.0)	0.0					0.0					0.0					0.0					0.0
Foundation Funds	(27.0)		(0.5)	(0.5)	(0.6)	(1.1)	(2.7)	(0.7)	(0.7)	(0.7)	(1.4)	(3.5)	(1.4)	(1.4)	(1.4)	(2.8)	(7.0)	(1.1)	(1.1)	(1.1)	(2.1)	(5.4)
Interest, Paid by Foundation	2.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4	0.1	0.2	0.2	0.3	0.7
Foundation Fundraising Commitment	0.0	1.6	1.3	1.4	1.3	1.1		3.0	4.0	5.0	5.6		6.4	7.3	7.9	7.0		11.0	15.2	18.7	19.2	

		Expended	THE PLEDGE PERIOD		
	TOTAL	to Mar 31/09	Fiscal 09/10	Fiscal 10/11	TOTAL
Total Project Costs (3) (4)	108.2	106.2	2.0		108.2
Funding Sources					
MoHLTC Superbuild (1)	(18.9)	(18.9)			(18.9)
MoHLTC - New Funds (2)	(52.9)	(48.2)	(4.7)		(52.9)
Hospital Capital Equipment Budget (5)	(5.2)	(2.6)	(1.3)	(1.3)	(5.2)
Operational Efficiency Savings After Relocation (6	(7.0)	0.0	(3.5)	(3.5)	(7.0)
Foundation Funds	(27.0)	(18.6)	(4.6)	(3.8)	(27.0)
Interest, Paid by Foundation	2.8	1.3	1.1	0.5	2.8
Foundation Fundraising Commitment	0.0	19.2	8.2	0.0	0.0

Cashflow: Review Team Option 2

- $108.2M P&G, CUP Allocation & MWing Shell Allocation
- P&G, M Wing Shell Single Stip Sum tender based on Review Team direction
- Four Floor M Wing Addition

All Foundation Pledges In Place with 69% of Cash Received

Notes
(1) $18.9M of the Superbuild Phase 1 total of $29.2 relates to these projects with $1.1M historically drawn down in Feb/03.
(2) MOH funds reflect actual historical receipts to March 05
(3) Budgeted Disbursements an approximation of Review team estimate
(4) Disbursements Cashflow assumes MOH direction on P&G review by May 6/05
(5) $1.3M Annually secured through the Hospital Capital Equipment budget starting 07/08
(6) Hospital operational efficiency savings of $3.5 M per year at the WCACC site, deriving from the P&G move to the Sunnybrook site, have been applied to the capital cashflow requirements, subsequent to the physical relocation of P&G in Q1, 09/10
(7) Excludes MWing Headstart Elevators

Option 2: Total P&G, Emergency Department, Four Floors Mwing, CUP

Sunnybrook & Women's College Health Sciences Centre
Major Capital Projects - Cashflow ($Millions) **Total P&G, Emerg,Four Flrs MWing,CUP**
Traditional MOHLTC Funding with 5% Holdback until project reconciliation
Interest Rate: 5.5%
Updated April 26, 2005

Sunnybrook & Women's College Health Science Centre
Capital Cashflow

Cashflow: Review Team Option 2
Total P&G, Emerg,
Four Flrs MWing,CUP

		Expended	THE DESIGN, TENDER, APPROVAL AND CONSTRUCTION PERIOD																	
		to	Fiscal 2005/06				Total	Fiscal 2006/07				Total	Fiscal 2007/08				Total	Fiscal 2008/09				Total
	TOTAL	Mar 31/05	Q1	Q2	Q3	Q4	05/06	Q1	Q2	Q3	Q4	06/07	Q1	Q2	Q3	Q4	07/08	Q1	Q2	Q3	Q4	08/09
P&G, CUP(part) & Infrastructure(part)	108.2	5.8	1.1	1.4	1.4	1.7	5.6	5.3	4.5	4.4	5.1	19.3	5.6	5.9	5.4	8.3	25.2	13.6	14.2	12.0	10.5	50.3
Emergency, AHU, CUP(part) & Infrastructure(part)(9)	53.5	3.0	0.7	0.9	0.9	2.5	5.0	4.4	5.5	5.5	5.8	21.2	6.6	6.6	3.6	2.5	19.3	2.6	2.4			5.0
Upper 2 Flrs M Wing Shell (8)	24.5	1.7	0.0	0.0	0.0	0.1	0.1	1.8	1.8	1.9	2.1	7.6	2.5	2.5	2.5	2.5	10.1	2.5	1.9	0.6		5.0
							0.0					0.0					0.0					0.0
Total Project Costs (3)(4)(7)	186.2	10.5	1.8	2.3	2.3	4.3	10.7	11.5	11.8	11.8	13.0	48.1	14.8	15.0	11.5	13.3	54.6	18.7	18.5	12.6	10.5	60.3
Funding Sources																						
MoHLTC Superbuild (1)	(26.7)	(1.1)	(1.9)	(1.0)	(1.1)	(1.9)	(5.9)	(4.6)	(4.7)	(4.4)	(3.1)	(16.9)	(2.9)	0.0	0.0	0.0	(2.9)	0.0	0.0	0.0	0.0	0.0
MoHLTC - New Funds (2)	(76.9)	(3.1)	(9.4)	0.0	0.0	0.0	(9.4)	0.0	0.0	0.0	(1.6)	(1.6)	(2.4)	(6.6)	(5.7)	(6.8)	(21.5)	(10.1)	(10.6)	(8.1)	(6.8)	(35.6)
Hospital Capital Equipment Budget (5)	(5.2)	0.0					0.0					0.0				(1.3)	(1.3)				(1.3)	(1.3)
Operational Efficiency Savings After Relocation (6)	(7.0)	0.0					0.0					0.0					0.0					0.0
Foundation Funds	(75.2)	0.0	(1.7)	(1.8)	(1.9)	(3.6)	(9.0)	(2.9)	(2.9)	(2.9)	(5.9)	(14.6)	(3.9)	(3.9)	(3.9)	(8.2)	(19.9)	(2.6)	(2.6)	(2.7)	(5.7)	(13.6)
Interest, Paid by Foundation	4.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.9	0.3	0.3	0.4	0.4	1.4
Foundation Fundraising Commitment	0.0	5.3	(4.9)	(5.4)	(6.1)	(7.2)		(3.2)	1.0	5.6	8.0		13.8	18.5	20.6	17.9		24.2	29.8	32.0	29.2	

Cashflow: Review Team Option 2
- $108.2M P&G, CUP Allocation & MWing Shell Allocation
- P&G, M Wing Shell Single Stip Sum tender based on Review Team direction
- Four Floor M Wing Addition

All Foundation Pledges In Place with 76% of Cash Received

		Expended	THE PLEDGE PERIOD		
		to	Fiscal	Fiscal	
	TOTAL	Mar 31/09	09/10	10/11	TOTAL
Total Project Costs (3) (4)	186.2	184.2	2.0		186.2
Funding Sources					
MoHLTC Superbuild (1)	(26.7)	(26.7)	0.0	0.0	(26.7)
MoHLTC - New Funds (2)	(76.9)	(71.2)	(5.7)	0.0	(76.9)
Hospital Capital Equipment Budget (5)	(5.2)	(2.6)	(1.3)	(1.3)	(5.2)
Operational Efficiency Savings After Relocation (6)	(7.0)	0.0	(3.5)	(3.5)	(7.0)
Foundation Funds	(75.2)	(57.1)	(11.2)	(6.9)	(75.2)
Interest, Paid by Foundation	4.8	2.6	1.6	0.6	4.8
Foundation Fundraising Commitment	0.0	29.2	11.1	0.0	0.0

Notes
(1) $26.7M of the Superbuild Phase 1 total of $29.2 relates to these projects with $1.1M historically drawn down in Feb/03
An additional $1.2M of Phase 1 Superbuild was drawn down against the Master Plan Project in Feb/03 which is part of Previous Proje
(2) MOH funds reflect actual historical receipts to March 2005
(3) Budgeted Disbursements an approximation of review team estimate
(4) Disbursements Cashflow assumes MOH direction on P&G review by May 6, 2005
(5) $1.3M Annually secured through the Hospital Capital Equipment budget starting 07/08
(6) Hospital operational efficiency savings of $3.5 M per year at the WCACC site, deriving from the P&G move to the Sunnybrook site, have been applied to the capital cashflow requirements, subsequent to the physical relocation of P&G in Q1, 09/10
(7) Excludes MWing Headstart Elevators
(8) Assumes no MOH funds subject to future discussions on Fitouts and related MOH funding
(9) Includes CUP allocation for Upper Two Floors M Wing shell

Total Project Cost Allocations		
P&G including Two Floor Shell		97.2
P&G Equipment		7.4
CUP, Infrastructure, Air Handling Units		
P&G Allocation	3.6	
Emergency Allocation	27.8	
Subtotal CUP, Infrastructure, AHU's		31.4
M Wing Two Floor Shell		24.5
Emergency		25.7
Total Project Cost		186.2

These budgets and timelines have been provided by the Kitts P&G Review team with the exception of the Emergency, CUP, Infrastructure project budgets. Emergency, CUP, Infrastructure project budgets & cashflow based on S&W sketch design submission dated Feb/05

Option 1b: P&G, CUP(part), Infrastructure(part)

Sunnybrook & Women's College Health Sciences Centre
Major Capital Projects - Cashflow ($Millions) **P&G, CUP(part) & Infrastructure(part)**
Traditional MOHLTC Funding with 5% Holdback until project reconciliation
Interest Rate 5.5%
Updated April 26, 2005

Sunnybrook & Women's College Health Science Centre Capital Cashflow

Cashflow: Review Team Option 1(b)
P&G, CUP(part) & Infrastructure(part)

		Expended to	THE DESIGN, TENDER, APPROVAL AND CONSTRUCTION PERIOD																		
			Fiscal 2005/06				Total	Fiscal 2006/07				Total	Fiscal 2007/08				Total	Fiscal 2008/09				Total
	TOTAL	Mar 31/05	Q1	Q2	Q3	Q4	05/06	Q1	Q2	Q3	Q4	06/07	Q1	Q2	Q3	Q4	07/08	Q1	Q2	Q3	Q4	08/09
First 2.0 Floors M Wing Shell	56.8	5.4	0.1	0.0	0.1	0.1	0.3	2.3	3.4	4.2	7.0	16.9	9.2	9.2	9.2	4.2	31.8	1.4				1.4
P&G Occupant Fit Out of M Wing	42.3	0.1	1.1	1.2	1.2	1.2	4.7	1.2	0.0	0.0	0.0	1.2	0.0	2.5	7.5	7.5	17.5	7.5	7.5	3.8		18.8
P&G FFE	7.4	0.0					0.0					0.0					0.0	2.5	2.5	2.4		7.4
Central Utilities Plant (Part)	3.4	0.3		0.1		0.3	0.4	0.5	0.4	0.4	0.5	1.8	0.4	0.5			0.9					0.0
Infrastructure Requirements (Part)	0.2						0.0		0.1			0.1	0.1				0.1					0.0
Total Project Costs (3) (4) (7)	109.1	5.8	1.2	1.3	1.3	1.6	5.4	4.0	3.9	4.6	7.5	20.0	9.7	12.2	16.7	11.7	50.3	11.4	10.0	6.2	0.0	27.6
Funding Sources																						
MoHLTC Superbuild (1)	(18.9)	(1.1)	(1.0)	(0.8)	(0.8)	(0.8)	(3.4)	(1.9)	(2.4)	(2.9)	(4.7)	(11.9)	(2.5)				(2.5)					0.0
MoHLTC - New Funds (2)	(53.5)	(3.1)					0.0					0.0	(3.6)	(7.7)	(10.6)	(7.4)	(29.3)	(7.2)	(6.4)	(4.0)	0.0	(17.6)
Hospital Capital Equipment Budget (5)	(5.2)	0.0					0.0					0.0				(1.3)	(1.3)				(1.3)	(1.3)
Operational Efficiency Savings After Relocation (6	(7.9)	0.0					0.0					0.0					0.0				(0.9)	(0.9)
Foundation Funds	(27.1)		(0.5)	(0.5)	(0.6)	(1.1)	(2.7)	(0.7)	(0.7)	(0.7)	(1.4)	(3.5)	(1.4)	(1.4)	(1.4)	(2.8)	(7.0)	(1.1)	(1.1)	(1.1)	(2.1)	(5.4)
Interest, Paid by Foundation	3.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.6	0.2	0.3	0.3	0.3	1.1
Foundation Fundraising Commitment	(0.0)	1.6	1.3	1.3	1.2	1.0		2.4	3.2	4.2	5.7		8.0	11.2	16.0	16.5		19.8	22.6	24.0	20.0	

All Foundation Pledges In Place with 69% of Cash Received

		Expended to	THE PLEDGE PERIOD		
	TOTAL	Mar 31/09	Fiscal 09/10	Fiscal 10/11	TOTAL
Total Project Costs (3) (4)	109.1	109.1			109.1
Funding Sources					
MoHLTC Superbuild (1)	(18.9)	(18.9)			(18.9)
MoHLTC - New Funds (2)	(53.5)	(50.0)	(3.5)		(53.5)
Hospital Capital Equipment Budget (5)	(5.2)	(2.6)	(1.3)	(1.3)	(5.2)
Operational Efficiency Savings After Relocation (6	(7.9)	(0.9)	(3.5)	(3.5)	(7.9)
Foundation Funds	(27.1)	(18.6)	(4.6)	(3.9)	(27.1)
Interest, Paid by Foundation	3.5	1.9	1.1	0.5	3.5
Foundation Fundraising Commitment	(0.0)	20.0	8.2	(0.0)	(0.0)

Cashflow: Review Team Option 1(b)
- $109.1M P&G, CUP Allocation & MWing Shell Allocation
- P&G, M Wing Shell Single Stip Sum tender based on Review team direction
- Two Floor Only M Wing Addition

Notes
(1) $18.9M of the Superbuild Phase 1 total of $29.2 relates to these projects with $1.1M historically drawn down in Feb/03.
(2) MOH funds reflect actual historical receipts to March '05.
(3) Budgeted Disbursements an approximation of review team estimate.
(4) Disbursements Cashflow assumes MOH direction on P&G review by May 6/05.
(5) $1.3M Annually secured through the Hospital Capital Equipment budget starting 07/08.
(6) Hospital operational efficiency savings of $3.5 M per year at the WCACC site, deriving from the P&G move to the Sunnybrook site, have been applied to the capital cashflow requirements, subsequent to the physical relocation of P&G in Q3, 08/09.
(7) Excludes MWing Headstart Elevators.

Option 1B : Total P&G, Emergency Department, 2 Floors Mwing, CUP

Sunnybrook & Women's College Health Sciences Centre
Major Capital Projects - Cashflow ($Millions) **Total P&G, Emerg,Two Flrs MWing,CUP**
Traditional MOHLTC Funding with 5% Holdback until project reconciliation
Interest Rate 5.5%
Updated April 26, 2005

Sunnybrook & Women's College Health Science Centre Capital Cashflow

Cashflow: Review Team Option 1(b)
Total P&G, Emerg,
2 Floors Mwing, CUP

		Expended	THE DESIGN, TENDER, APPROVAL AND CONSTRUCTION PERIOD																	
		to	Fiscal 2005/06				Total	Fiscal 2006/07				Total	Fiscal 2007/08				Total	Fiscal 2008/09				Total
	TOTAL	Mar 31/05	Q1	Q2	Q3	Q4	05/06	Q1	Q2	Q3	Q4	06/07	Q1	Q2	Q3	Q4	07/08	Q1	Q2	Q3	Q4	08/09
P&G, CUP(part) & Infrastructure(part)	109.1	5.8	1.2	1.3	1.3	1.6	5.4	4.0	3.9	4.6	7.5	20.0	9.7	12.2	16.7	11.7	50.3	11.4	10.0	6.2		27.6
Emergency, AHU, CUP(part) & Infrastructure(part)	53.5	3.0	0.7	0.9	0.9	2.5	5.0	4.4	5.5	5.5	5.8	21.2	6.6	6.5	3.6	2.5	19.3	2.6	2.4			5.0
							0.0					0.0					0.0					0.0
Total Project Costs (3)(4)(7)	162.6	8.8	1.9	2.2	2.2	4.1	10.4	8.4	9.4	10.1	13.3	41.2	16.3	18.8	20.3	14.2	69.6	14.0	12.4	6.2	0.0	32.6
Funding Sources																						
MoHLTC Superbuild (1)	(26.7)	(1.1)	(2.0)	(1.0)	(1.0)	(1.8)	(5.8)	(3.8)	(4.3)	(4.5)	(4.7)	(17.3)	(2.5)	0.0	0.0	0.0	(2.5)	0.0	0.0	0.0	0.0	0.0
MoHLTC - New Funds (2)	(77.5)	(3.1)	(9.4)	0.0	0.0	0.0	(9.4)	0.0	0.0	0.0	(1.6)	(1.6)	(5.4)	(10.6)	(12.6)	(9.0)	(37.6)	(8.7)	(7.9)	(4.5)	0.0	(21.1)
Hospital Capital Equipment Budget (5)	(5.2)	0.0					0.0					0.0				(1.3)	(1.3)				(1.3)	(1.3)
Operational Efficiency Savings After Relocation (6)	(7.9)	0.0					0.0					0.0				0.0	0.0				(0.9)	(0.9)
Foundation Funds	(49.7)	0.0	(1.3)	(1.3)	(1.4)	(2.7)	(6.7)	(1.8)	(1.8)	(1.8)	(3.6)	(9.0)	(2.6)	(2.6)	(2.6)	(5.4)	(13.2)	(1.8)	(1.8)	(1.9)	(3.7)	(9.2)
Interest, Paid by Foundation	4.4	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.3	0.8	0.3	0.4	0.4	0.4	1.5
Foundation Fundraising Commitment	0.0	4.6	(6.2)	(6.3)	(6.5)	(6.9)		(4.1)	(0.7)	3.1	6.5		12.4	18.2	23.4	22.2		26.0	29.0	29.2	23.8	

Cashflow: Review Team Option 1(b)
* $109.1M P&G, CUP Allocation & MWing Shell Allocation
* P&G, M Wing Shell Single Stip Sum tender based on Review team direction
* Two Floor Only M Wing Addition

All Foundation Pledges In Place with 77% of Cash Received

		Expended	THE PLEDGE PERIOD		
		to	Fiscal	Fiscal	
	TOTAL	Mar 31/05	09/10	10/11	TOTAL
Total Project Costs (3) (4)	162.6	162.6			162.6
Funding Sources					
MoHLTC Superbuild (1)	(26.7)	(26.7)			(26.7)
MoHLTC - New Funds (2)	(77.5)	(73.0)	(4.5)		(77.5)
Hospital Capital Equipment Budget (5)	(5.2)	(2.6)	(1.3)	(1.3)	(5.2)
Operational Efficiency Savings After Relocation (6)	(7.9)	(0.9)	(3.5)	(3.5)	(7.9)
Foundation Funds	(49.7)	(38.1)	(6.7)	(4.9)	(49.7)
Interest, Paid by Foundation	4.4	2.5	1.3	0.6	4.4
Foundation Fundraising Commitment	0.0	23.8	9.1	0.0	0.0

Notes
(1) $26.7M of the Superbuild Phase 1 total of $29.2 relates to these projects with $1.1M historically drawn down in Feb/03.
An additional $1.2M of Phase 1 Superbuild was drawn down against the Master Plan Project in Feb/03 which is part of Previous Projects.
(2) MOH funds reflect actual historical receipts to March 2005.
(3) Budgeted Disbursements an approximation of Review Team estimate.
(4) Disbursements Cashflow assumes MOH direction on P&G review by May 6, 2005.
(5) $1.3M Annually secured through the Hospitals' Capital Equipment budget starting 07/08.
(6) Hospital operational efficiency savings of $3.5 M per year at the WCACC site, deriving from the P&G move to the Sunnybrook site, have been applied to the capital cashflow requirements, subsequent to the physical relocation of P&G in Q3, 08/09.
(7) Excludes MWing Headstart Elevators.

Total Project Cost Allocations

P&G including Two Floor Shell		98.1
P&G Equipment		7.4
CUP, Infrastructure, Air Handling Units		
P&G Allocation	3.6	
Emergency Allocation	27.8	
Subtotal CUP, Infrastructure, AHU's		31.4
Emergency		25.7
Total Project Cost		162.6

These budgets and timelines have been provided by the Kitts P&G Review team with the exception of the Emergency, CUP, Infrastructure project budgets. Emergency, CUP, Infrastructure project budgets & cashflow based on S&W sketch design submission dated Feb/05